

July 7, 2023

VIA ELECTRONIC FILING

Oregon Public Utility Commission Attn: Filing Center P.O. Box 1088 Salem, OR 97308-1088

RE: UG 461: Avista Request for a General Rate Revision Opening Testimony and Sponsored Exhibits of Environmental Intervenors Sierra Club and Climate Solutions

Dear Filing Center:

Attached for filing, please find Environmental Intervenors' Opening Testimony and sponsored exhibits for the above-referenced proceeding. The consolidated PDF for filing includes testimony of Bradley Cebulko, Carra Sahler, Greer Ryan, and Benedikt Springer.

This version of the filing has been redacted to remove confidential information in the testimony and exhibits of Carra Sahler and Greer Ryan. An unredacted version of the filing will be transmitted to your office and party representatives under separate cover pursuant to General Protective Order No. 23-064 and Filing Procedure Order No. 20-088.

Please feel free to reach out to me directly with any questions about this filing.

Sincerely,

Jan Hasselman Senior Attorney, WSBA No. 29107 [Admitted Pro Hac Vice] Earthjustice 810 Third Avenue, Suite 610 Seattle, WA 98104 206-343-7340 jhasselman@earthjustice.org



#### CERTIFICATE OF SERVICE UG 461

I hereby certify that on July 7, 2023, I served an unredacted confidential version of ENVIRONMENTAL INTERVENORS' OPENING TESTIMONY AND SPONSORED EXHIBITS upon the Commission and each parties' representative(s) designated to receive confidential information through a secure, encrypted e-mail attachment.

PUC FILING CENTER	AVISTA
Filing Center, Public Utilities Commission of	PATRICK EHRBAR (C)
Oregon	AVISTA Utilities
PO Box 1088	PO BOX 3727
Salem, OR 97308-1088	SPOKANE WA 99220-3727
PUC.FilingCenter@state.or.us	patrick.ehrbar@avistacorp.com
AWEC	CUB
CHAD M. STOKES (C)	MICHAEL GOETZ (C)
CABLE HUSTON LLP	OREGON CITIZENS' UTILITY BOARD
1455 SW Broadway, Ste. 1500	610 SW Broadway, Ste. 400
Portland, Oregon 97201	Portland, Oregon 97205
cstokes@cablehuston.com	mike@oregoncub.org
CUB	STAFF
JOHN GARRETT (C)	MATTHEW MULDOON (C)
OREGON CITIZENS' UTILITY BOARD	PUBLIC UTILITY COMMISSION OF
610 SW Broadway, Ste. 400	OREGON
Portland, Oregon 97205	201 High Street SE, Ste. 100
john@oregoncub.org	Salem, Oregon 97301
	matt.muldoon@puc.oregon.gov
STAFF	
JOHANNA RIEMENSCHNEIDER (C)	
DEPARTMENT OF JUSTICE	
BUSINESS ACTIVITIES SECTION	
1162 Court St. NE	
Salem, Oregon 97301-4796	
johanna.riemenschneider@doj.state.or.us	

<u>s/ Adam Hinz</u> Adam Hinz, Paralegal Earthjustice

#### **BEFORE THE PUBLIC UTILITY COMMISSION**

#### **OF OREGON**

#### UG 461

)

In the Matter of

AVISTA CORPORATION, dba AVISTA UTILITIES,

) ENVIRONMENTAL INTERVENORS' ) OPENING TESTIMONY )

Request for a General Rate Revision.

#### OPENING TESTIMONY

OF

#### SIERRA CLUB AND CLIMATE SOLUTIONS

July 7, 2023

#### **TESTIMONY INDEX**

Witness	Contents				
Bradley Cebulko	Environmental Intervenors/100: Testimony				
Strategen	Environmental Intervenors/101: Qualifications				
-	Environmental Intervenors/102: Resume				
	Environmental Intervenors/103-11: Exhibits				
Carra Sahler	Environmental Intervenors/200: Testimony				
Green Energy	Environmental Intervenors/201: Qualifications				
Institute at Lewis &	Environmental Intervenors/202: Resume				
Clark Law School	Environmental Intervenors/203–17: Exhibits				
Greer Ryan	Environmental Intervenors/300: Testimony				
<b>Climate Solutions</b>	Environmental Intervenors/301: Qualifications				
	Environmental Intervenors/302: Resume				
	Environmental Intervenors/303-31: Exhibits				
Benedikt Springer	Environmental Intervenors/400: Testimony				
Community Action	Environmental Intervenors/401: Qualifications				
Partnership of Environmental Intervenors/402: Resume					
Oregon	Environmental Intervenors/403-4: Exhibits				

#### **BEFORE THE PUBLIC UTILITY COMMISSION**

#### **OF OREGON**

UG 461

In the Matter of	)
AVISTA CORPORATION, dba AVISTA UTILITIES,	)
Request for a General Rate Revision.	)

### **OPENING TESTIMONY**

### **OF BRADLEY CEBULKO**

### ON BEHALF OF SIERRA CLUB AND CLIMATE SOLUTIONS

(Non-Confidential)

July 7, 2023

#### **TABLE OF CONTENTS**

1.	Introduction	3
2.	Overview of Avista's General Rate Case	6
	A. Avista's General Rate Case is Not Reflective of its CPP Obligations	8
	B. Avista's Business-As-Usual Approach is Risky for Customers	10
	C. Avista's Line Extension Policies are Incompatible with CPP Compliance	19
3.	Non-Pipeline Alternative Analysis	25
	A. Overview of Non-Pipeline Alternatives	25
	B. Applicability of Non-Pipeline Alternatives in this Rate Case	29
	C. Recommendations and NPA Framework	33
4.	Community Climate Investment Cost Recovery	37
5.	Summary Of Recommendations To The Commission In This Case	38

#### 1. <u>Introduction</u>

1

2

15

16

17

18

19

20

21

22

23

- Q. Please state your name and business address.
- A. My name is Bradley Cebulko. My business address is 10265 Rockingham Dr. Suite #1004061, Sacramento, CA 95827.
- 5 Q. By whom are you employed and in what capacity?
- A. I serve as Senior Manager at Strategen Consulting, where I lead much of our gas transition
  work, as well as consult on other utility regulatory issues including electric and gas longterm planning and new regulatory business models.
- 9 Q. What did you review in preparation for this testimony?
- 10 A. I have read the Company's filings pertaining to docket UG-461, the Company's discovery responses, and Avista's 2023 IRP.
- 12 **Q.** On whose behalf are you submitting testimony?
- 13 A. I am submitting testimony on behalf of Sierra Club and Climate Solutions.
- 14 **Q.** Please summarize your professional experience.

A. At Strategen, I work with consumer advocates, non-governmental organizations, and regulators on electric and natural gas utility regulatory issues including gas and electric utility decarbonization, new regulatory business models, and gas and electric long-term planning.

Prior to joining Strategen in 2021, I worked at the Washington Utilities and Transportation Commission (UTC) for 8 years. From 2013-2016, I was an analyst with the UTC Commission Staff focused on electric and natural gas integrated resource planning (IRP), electric and natural gas energy efficiency programs, and new program design and implementation. I was also the Staff lead for natural gas IRPs from 2014-2016. From 2016-

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

2021, I was an Advisor to the Washington State Commissioners, where I led the Commissioners' review of major filings and adjudications, natural gas general rate cases, purchase gas adjustments, rulemakings, and natural gas integrated resource plans. As the Senior Policy Advisor for Energy Strategy, from 2019 to 2020 I led the UTC's rulemakings to implement Washington state's Clean Energy Transformation Act.

Q. Have you testified before the Oregon Public Utilities Commission previously?

 A. Yes. I testified on behalf of Vitesse, LLC, regarding Pacific Power's Accelerated Commitment Tariff in Docket UE 399.

**Q.** Have you testified or provided comments in regulatory proceedings in other states?

A. Yes, I have testified and provided comments before several Public Utility Commissions, including in Washington state, Illinois, Minnesota, Michigan, and Massachusetts. My resume and summary of qualifications, attached as Exhibits Environmental Intervenors/101 and 102, provide additional detail.

14 **Q**.

1

2

3

4

5

6

7

8

9

10

11

12

13

15

16

17

18

19

20

21

22

#### What is the purpose of your testimony?

A. The purpose of my testimony is to demonstrate that, given the broader energy transition trends and Avista's requirement to comply with Oregon climate regulations, the pace of Avista's capital expenditures is risky to customers. The Company does not have a viable, pipeline-based pathway to decarbonize its gas system as required by the Climate Protection Program. Yet Avista is continuing a business-as-usual approach in this rate case in which it continues to subsidize customer expansion and aggressively invest in long-lived pipeline assets. The Commission should not sanction an approach that puts so much risk on customers. In addition to raising concern about the pace of the Company's

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

investments, I identify two mechanisms that the Commission can use to align utility spending with customer goals and State policy objectives.

#### Q. How is your testimony organized?

A. My testimony is organized into the following sections:

- Section II: I provide a contextual discussion of the utility's general rate case
  request amidst the broader, transformational changes occurring in the gas utility
  sector, and discuss the significant risk the Company's business-as-usual
  approach to planning and investments creates for its customers and for
  compliance with the CPP. I also discuss the risk to customers of continuing to
  allow the utility to use ratepayer money to subsidize the expansion of the gas
  system through line extension allowances.
  - Section III: I provide an overview of non-pipeline alternatives (NPA) and the need to conduct non-pipeline alternative (NPA) analysis for identifying the least cost, least risk solutions for customer needs. I focus on specific capital expenditures, in particular the utility's capacity expansion pipeline investments.
    - Section IV: I focus on the regulatory treatment of Community Climate Investments (CCIs) and their role in meeting CPP compliance.

#### **Q.** Please summarize your recommendations.

A. In this testimony I make the following recommendations:

- Service and Main Line Extension Allowances: I recommend the Commission set service and main line extension allowances to \$0 going forward.
- Non-Pipeline Alternatives: I recommend that the Commission require an NPA analysis for certain capital investments, first analyzed in the Company's

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

1		Integrated Resource Plan (IRP) and subsequently in the business case when the
2		Company seeks cost recovery in a general rate case. Specifically, I recommend
3		that: (1) NPA analysis apply to portfolios of natural gas distribution system
4		reinforcements and expansion projects within the same geographical locality, (2)
5		NPA analysis apply when project portfolios meet a the lesser threshold of 0.2% of
6		net plant in service or \$1 million, (3) The Commission explicitly define
7		electrification as a resource to be evaluated in NPA analyses, and (4) Distinguish
8		reliability projects from capacity projects to allow qualitative factors in the
9		evaluation of reliability solutions.
10		• Community Climate Investments: I recommend that the Commission clarify in
11		its final order that it will only consider CPP compliance cost recovery, including
12		costs to acquire CCIs, through a rate case.
13	2.	<b>Overview of Avista's General Rate Case</b>
14	Q.	Why has Avista filed this general rate case?
15	A.	Avista argues that it is experiencing a steady erosion in earnings due to "headwinds"
16		including inflation, rising interest rates, higher depreciation expense, and higher than
17		expected pension expense. <sup>1</sup> Avista is requesting an \$11 million increase to its revenue
18		requirement, a 7.4% increase. <sup>2</sup> Avista proposes a \$35.66 million adjustment to the rate

<sup>&</sup>lt;sup>1</sup> Avista/100, Vermillion/6.

<sup>&</sup>lt;sup>2</sup> Avista/501, Shultz/2.

base and a 7.59% rate of return.<sup>3</sup> Witness Vermillion testifies that the proposed additions would increase the average residential customer rates by \$6.20/month, or 8.1%.<sup>4</sup>

#### Q. What are the primary drivers of Avista's plant investments in Oregon?

Avista testifies that the primary drivers of the rate base adjustment are natural gas distribution investments, general plan investment, and enterprise technology investments. The largest plant additions are associated with "customer requested" costs, which primarily includes line extensions, and "mandatory & compliance costs," such as the Aldyl-A pipe replacement program.

Oregon Plant Investment								
Capital Investment Transfers to Plant								
For October 1, 2022 through December 31, 2024								
-		ds (\$000's)			- 1			
	Natural Gas General Enterprise							
Plant Investment Driver	Dir	stribution	Plant		Technology			Total
October 1, 2022 through December 31, 2023	3							
A. Customer Requested	\$	11,944	\$	-	\$	-	\$	11,944
B. Customer Service Quality & Reliability	\$	-	\$	-	\$	2,373		2,373
C. Mandatory & Compliance	\$	17,803	\$	-	\$	179		17,982
D. Asset Condition	\$	1,958	\$	1,142	\$	351		3,450
E. Performance & Capacity	\$	1,312	\$	31	\$	4,490		5,833
F. Failed Plant & Operations	\$	4,502	\$	-	\$	55		4,557
Total Transfers to Plant	\$	37,518	\$	1,173	\$	7,447	\$	46,139
January 1, 2024 through December 31, 2024	4							
A. Customer Requested <sup>[1]</sup>	\$	9,019		-		-	\$	9,019
B. Customer Service Quality & Reliability		-		-		-		-
C. Mandatory & Compliance		-		-		-		-
D. Asset Condition		-		-		-		-
E. Performance & Capacity		-		-		-		-
F. Failed Plant & Operations		-		-		-		-
Total Transfers to Plant	S	9,019	\$	-	S	-	\$	9,019
<sup>[1]</sup> The Company included in this case Oregon's share of growth capital on an AMA basis totaling								
approximately \$3.717 million.								

Figure 1: Avista 2023 GRC Capital Investments

<sup>3</sup> Avista/501, Shultz/1.

<sup>4</sup> Avista/100, Vermillion/17.

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

A.

Considering the Company's forecasted 0.8% annual customer growth rate from 2022 to 2024,<sup>5</sup> such an increase in rates is highly concerning; the Company continues to invest heavily into a system with dwindling customer growth.

#### A. Avista's General Rate Case is Not Reflective of its CPP Obligations

### Q. Did the Company's testimony address any recent state or federal policy changes, or emergent trends such as electrification, as relevant to the rate case?

A. Not with any significance. The Company acknowledges that efforts to reduce greenhouse gas emissions, including emergent local prohibitions on new gas connections as well as cost-effective electrification, pose a threat to its business.<sup>6</sup> The Company also acknowledges that it has an obligation to comply with the state's greenhouse gas reduction program, the Climate Protection Program (CPP).<sup>7</sup> However, acknowledgement of these issues is the extent of the Company's analysis and consideration. I observe two problems with the Company's general rate case:

 The Company's testimony does not sufficiently explain how it is incorporating and valuing the risk of declining demand due to emergent state and local regulations, cost-effective electrification, and the federal Inflation Reduction Act's incentives for high-efficiency electric appliances to its capital investments.

2. The Company does not present any analysis seeking to understand the costs and risks of compliance with the CPP, much less its impact on the utility's proposed investments in this rate case.

<sup>5</sup> Avista/800, Forsyth/18.

<sup>6</sup> Avista/300, McKenzie/25.

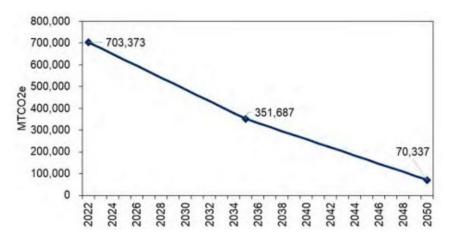
<sup>7</sup> Avista/400, Holland/10.

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

#### Q. Please provide an overview of Oregon's Climate Protection Program.

Signed in 2020, Oregon executive order 20-04 mandates a statewide 45% reduction in 1990 emissions levels by 2035 and 80% reduction in 1990 emissions levels by 2050.<sup>8</sup> The executive order directed the Oregon Department of Environmental Quality ("DEQ") to establish an emissions cap and reduce program.<sup>9</sup> The Climate Protection Program, administered by DEQ, sets a declining cap on GHG emissions for each of the Oregon gas distribution companies. Avista's emissions compliance cap is shown in Figure # below.

Figure 2: Avista Annual Emission Compliance Cap<sup>10</sup>



#### 10 **Q.** Does Avista consider the implications of the CPP in this rate case?

A. No. The Company seeks recovery for its investments in this general rate case and therefore has an obligation to demonstrate its decision making was prudent. When making investment decisions that won't be fully depreciated for decades, as in this rate case, the utility must show that its investments are appropriately sized for the future and will support its efforts to comply with all applicable laws. However, the Company neither

<sup>8</sup> Oregon Executive Order 20-04, at 5, <u>https://www.oregon.gov/gov/eo/eo\_20-04.pdf</u>.
<sup>9</sup> Id.

<sup>10</sup> Avista/400, Holland/9.

1

2

3

4

5

6

7

8

9

11

12

13

14

15

A.

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

discusses how it will comply with the CPP nor provides analysis or testimony explaining why the investments in this rate case will support the Company's compliance with the CPP. The Company's 2023 Integrated Resource Plan details Avista's preferred portfolio of resources for CPP compliance. While the IRP is an integral component of furthering the goals of the CPP, it is ultimately only a modeling exercise used to inform the utility's decision making. The Company's complete omission of a serious CPP compliance risk assessment is concerning. The absence of such a risk evaluation, along with insufficient discussion of company decarbonization measures, indicate that the utility is operating business-as-usual.

Β.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

#### Avista's Business-As-Usual Approach is Risky for Customers

#### Q. Why is a business-as-usual approach risky for customers?

A. Gas utility investments are long-lived assets that are recovered through rates over a period of decades. Distribution mains and services have useful lives of over forty years, meaning that pipes laid today will not be fully depreciated until well beyond 2050.<sup>11</sup> This poses a risk to ratepayers, who will pay for capital investments even if they are unused or underused in the future. As I will explain, continued pipeline investments pose CPP compliance challenges, as it is extremely unlikely the utility will be able substitute fossil gas with low-carbon fuels in sufficient quantities to achieve the state's greenhouse gas emissions reduction requirements.

<sup>11</sup> Avista/702, Spanos/65.

Q. How does the energy transition increase the risks of a business-as-usual approach for gas customers?

A. The CPP and the shift towards non-fossil energy sources will result in declining gas throughput, which means that the cost of the fixed delivery system must be recovered across fewer therms of gas, which will put upward pressure on rates for remaining customers. This upward pressure on rates could influence other customers to electrify or invest in efficiency measures, creating a cycle of increasing rates for customers remaining on the gas distribution system. As low-income customers are the least likely to be able to electrify, they will disproportionately carry the costs and risks of the gas utility. Avista's business-as-usual approach fails to account for this risk. Continued capital spending in this rate case has augmented the fixed costs that must be recovered from ratepayers.

#### **Q.** Does Avista concede that the energy transition is a business risk?

A. Yes. In their testimony supporting a ROE increase, Witness McKenzie cites business risks associated with emissions compliance and legislation curbing the natural gas system, testifying that such policies, "could constrain the ability of natural gas utilities such as Avista to recover costs."<sup>12</sup> Witness McKenzie's concerns, however, are not reflected in the Company's IRP, where the Company is forecasting increasing demand throughout the planning horizon.<sup>13</sup> Arguing for greater returns to combat a risk that the utility does not incorporate into its business cases for capital investments is unreasonable.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

<sup>&</sup>lt;sup>12</sup> Avista/300, McKinsey/26.

<sup>&</sup>lt;sup>13</sup> Demand rises from roughly 14 million Dekatherms in 2023 to roughly 16 million Dekatherms in 2045. Avista/402, Avista 2023 Natural Gas IRP, at iv.

1

A.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

#### Q. How does Avista seek to decarbonize its distribution system?

Avista's preferred resource strategy, as identified in its 2023 IRP, relies heavily on alternative fuels, including renewable natural gas (RNG), green hydrogen, and synthetic methane to meet compliance. However, alternative fuels are expensive and have limited potential to replace fossil gas. Each of these alternative fuels has technical and economic limitations and it is implausible for Avista to scale the use of these fuels to meet the requirements of the CPP.

RNG: Both availability and price limit the acquisition of RNG. Avista's IRP identifies four sources of RNG (dairy, food waste, landfill gas, and wastewater) and none are cost effective.<sup>14</sup> Avista projects that landfill gas, the least costly of the feedstocks, will be nearly three times more expensive than natural gas in 2025 and will become even more expensive to acquire beyond 2025.<sup>15</sup> Additionally, RNG supply in Avista's service territory is limited. Avista would need to virtually monopolize the entire state's landfill gas and wastewater resources (the next most cost-effective feedstock) to produce enough RNG to displace natural gas use.<sup>16</sup> A report sponsored by the American Gas Foundation determined that a high resource potential scenario could yield, by 2040, about 14.8 TBtu per year in

<sup>&</sup>lt;sup>14</sup> Avista/402, at 4-26.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> Renewable Sources of Natural Gas. American Gas Foundation, <u>https://gasfoundation.org/wp-content/uploads/2019/12/AGF-2019-RNG-Study-Full-Report-FINAL-12-18-19.pdf?source=content\_type%3Areact%7Cfirst\_level\_url%3Aarticle%7Csection%3Amain\_content%7Cbutton%3Abody\_link, see Appendix A.</u>

RNG from the sources Avista identified across the entire state.<sup>17</sup> For comparison, Avista's 2023 IRP assumes total Oregon demand to be roughly 16 TBtu in 2040.<sup>18</sup> RNG is in demand not only from other gas utilities, , but also from the transportation sector for compliance with the Federal Renewable Fuel Standard and the California and Oregon Low Carbon Fuel Standards and, potentially, from the electric generation sector.

• Green hydrogen: Green hydrogen offers little potential for emissions reduction in the gas distribution system, and it comes at a steep cost. Green hydrogen, produced with renewable electric generation, can be blended with natural gas in the distribution system to reduce some emissions. However, research shows that the risk of leaks and safety incidents increase as hydrogen concentrations increase, <sup>19</sup> resulting in a theoretical maximum of 20% hydrogen blends by volume.<sup>20</sup> Since hydrogen is three times less energy dense than natural gas, a 20% blend could at most offset 7% of distribution system emissions.<sup>21</sup> This limited emissions reduction comes at a high cost; Avista's 2023 IRP forecasts the 2025 price of hydrogen to be ten times higher than fossil gas prices and roughly four

<sup>&</sup>lt;sup>17</sup> Renewable Sources of Natural Gas. American Gas Foundation, <u>https://gasfoundation.org/wp-content/uploads/2019/12/AGF-2019-RNG-Study-Full-Report-FINAL-12-18-19.pdf?source=content\_type%3Areact%7Cfirst\_level\_url%3Aarticle%7Csection%3Amain\_content%7Cbutton%3Abody\_link, see Appendix A.</u>

<sup>&</sup>lt;sup>18</sup> Avista/402, at iv.

<sup>&</sup>lt;sup>19</sup> Docket R.13-02-008, Ruling, Attachment 2. Hydrogen Blending Impacts Study, July 18, 2022.

<sup>&</sup>lt;sup>20</sup> Melaina, M. W., et al. "Blending Hydrogen into Natural Gas Pipeline Networks: A Review of Key Issues." *National Renewable Energy Laboratory*, U.S. Department of Energy, Mar. 2013, <u>https://www.nrel.gov/docs/fy13osti/51995.pdf</u>.

<sup>&</sup>lt;sup>21</sup> Docket R.13-02-008, Ruling, Attachment 2. Hydrogen Blending Impacts Study, July 18, 2022.

times higher than gas prices in 2040.<sup>22</sup> Moreover, demand for green hydrogen from industrial and heavy-duty transportation sectors facing greater decarbonization hurdles will only increase competition for this expensive resource.

• Synthetic methane: I am unaware of any commercial development and use of synthetic methane. The production of low-carbon synthetic methane requires a number of technological breakthroughs in order to be cost effective. Synthetic methane is produced through a process called methanation that combines green hydrogen with carbon dioxide, sourced from carbon capture technology. Neither green hydrogen nor carbon capture are cost competitive, and only a handful of methanation pilots exist worldwide.<sup>23</sup> The failure of one of these technologies to materialize or be cost competitive threatens the viability of synthetic gas. Yet despite these constraints, Avista projects that synthetic methane will be far-and-away the largest resource in its preferred resource strategy by 2045.<sup>24</sup> Relying on the rapid evolution of a fuel that is not currently commercially produced is unrealistic and risky and not consistent with least cost, least risk planning.

<sup>22</sup> Avista/402, at 4-26.

<sup>24</sup> Avista/402.

<sup>&</sup>lt;sup>23</sup> "Green' Methane Pilot Plant Starts Up." Chemical Processing, 3 July 2018, <u>https://www.chemicalprocessing.com/processing-equipment/reaction-</u> <u>synthesis/article/11312596/green-methane-pilot-plant-starts-up.</u>

The Oregon PUC has itself noted these challenges and encouraged utilities to be conservative in planning for alternative supply resources given the "unpredictability" with how much of these fuels will be available, and when.<sup>25</sup>

Q. Does the Company propose to solely rely on alternative fuels for compliance with the CPP?

A. No. The Company also proposes to rely on continued fossil gas usage coupled with community climate investments (CCI).<sup>26</sup> The CPP allows fuel suppliers, like Avista, to use a limited and declining number of CCI credits for compliance.<sup>27</sup> In Section IV, I address the Company's proposed cost recovery of CCI investments.

#### **Q.** Are there available, cost-effective methods for complying with the CPP?

A. Yes. Electrification and energy efficiency measures can reduce gas sector emissions and do so cost-effectively. Avista has a long and successful partnership with the Energy Trust of Oregon delivering cost-effective energy efficiency programs. All else being equal, there should be more cost-effective energy efficiency opportunities under a carbon reduction regulatory scheme like the Climate Protection Program.

Second, building electrification is available and cost effective today. A 2022 report by Synapse Energy Economics suggests that building electrification in Oregon could result in billions of dollars in net present savings.<sup>28</sup> It is notable that this report did

<sup>27</sup> Avista/402, pg. 5-6.

<sup>&</sup>lt;sup>25</sup> Oregon Public Utility Commission, "Natural Gas Fact Finding Final Report, <u>https://edocs.puc.state.or.us/efdocs/HAU/um2178hau111621.pdf</u>, see pg. 29.

<sup>&</sup>lt;sup>26</sup> Avista/402, pg. iv.

<sup>&</sup>lt;sup>28</sup> Toward New Zero Emission from Oregon Buildings, Emissions and Cost Analysis of Efficient Electrification Scenario, Synapse Energy Economics, Inc., Prepared for Sierra Club. June 23,

not include the impacts of the IRA, which allocated hundreds of millions of dollars to expand adoption of high-efficiency electric appliances. The IRA provides a \$2,000 tax credit to households that purchase a heat pump, regardless of income, and rebated that can reach up to \$8,000, depending on household income.<sup>29</sup> Additionally, a 2020 RMI study found that new all-electric single-family homes have a lower net present cost than new mixed-fuel homes, even in cold climates like Minneapolis and Denver.<sup>30</sup> This study was also completed prior to the Inflation Reduction Act (IRA), which has made the economics of an all-electric single family home more attractive. Unlike alternative fuels, electrification provides a proven and cost-effective method for decarbonization. Moreover, I expect that the building electrification will continue to accelerate as further investment in heat pumps will improve appliance efficiencies and lower costs.

12

1

2

3

4

5

6

7

8

9

10

11

13

14

15

16

17

#### Q. Are there factors driving electrification?

A. Yes, electrification policies and naturally occurring economic fuel switching are driving electrification nationally and in Oregon. First, electrification policies, such as phaseouts of new gas connections are not a theoretical risk; the Ashland City Council is expected to announce a new ordinance phasing out the use of fossil fuels in new construction, the second city to do so in Oregon.<sup>31</sup> Policymakers are increasingly supportive of

<sup>30</sup> Claire McKenna, et.al. "All-Electric New Homes: A Win for the Climate and the Economy". RMI. Oct. 15, 2020. Available at: <u>https://rmi.org/all-electric-new-homes-a-win-for-the-climate-and-the-economy/</u>.

<sup>31</sup> <u>https://www.ijpr.org/politics-government/2023-06-07/ashland-moves-forward-with-electrification-ordinance</u>.

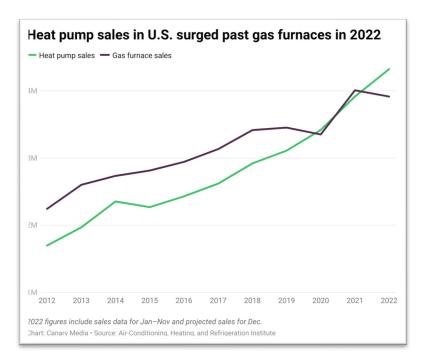
<sup>2022.</sup> P. 38. Available at: <u>https://www.synapse-energy.com/net-zero-emissions-oregon-buildings</u>.

<sup>&</sup>lt;sup>29</sup> Congress.gov. "Text - H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022." August 16, 2022. <u>https://www.congress.gov/bill/117th-congress/house-bill/5376/text</u>.

electrification policies as they recognize it as a cost-effective decarbonization strategy, as demonstrated in the Synapse report detailing the benefits of building electrification. Washington state has passed statewide rules effectively eliminating gas appliances in new residential and commercial construction, effective this year. Just recently, Oregon passed similar legislation that would significantly accelerate the electrification trend in new commercial and multi-family buildings.<sup>32</sup>

The second electrification driver is naturally occurring fuel-switching due to costeffective electrified alternatives and changing consumer preferences. In 2022, for the first time, heat pump sales in the U.S. exceeded gas furnace sales.

Figure 3: Sales of Heat Pumps and Gas Furnaces



<sup>&</sup>lt;sup>32</sup> Enrolled House Bill 3409, Available at: <u>https://olis.oregonlegislature.gov/liz/2023R1/</u> Downloads/MeasureDocument/HB3409/Enrolled.

This trend has continued through the first four months of 2023, as electric appliance sales continue to outpace gas appliance counterparts.<sup>33</sup> This trend is not surprising; heat pumps are far more efficient than gas furnaces, technology costs are dropping, and heat pump performance is improving.<sup>34</sup>

# Q. Does the CPP provide a direct financial incentive for Avista to reduce its gas system investments?

A. Not directly. The CPP will help internalize the environmental costs of using fossil gas and thus will increase the marginal cost of the fuel for heating buildings. However, the CPP does not place a limit on the types of delivery system investments the utility makes. Moreover, environmental compliance costs are typically passed onto customers and are not borne by the Company or its shareholders. Indeed, as I will address in section V of my testimony, the Company has indicated it intends to seek recovery of CPP compliance costs through a rate rider. The point is that Avista, despite the CPP, will still have an incentive to invest in and expand upon its distribution system to earn a return for its shareholders.

<sup>&</sup>lt;sup>33</sup> See: <u>https://www.ahrinet.org/analytics/statistics/monthly-shipments</u>.

<sup>&</sup>lt;sup>34</sup> Maria Virginia Olano. "Chart: Americans bought more heat pumps than gas furnaces last year". Canary Media. Feb. 10, 2023. Available at: <u>https://www.canarymedia.com/articles/heat-pumps/chart-americans-bought-more-heat-pumps-than-gas-furnaces-last-year</u>.

The Commission must hold Avista accountable for demonstrating that its capital investment strategy is considering each of these risks in its rate case. Avista acknowledges these risks only as they relate to the Company's request for a higher ROE and, yet its actions and investments do not reflect its rhetoric. Avista must account for these risks first in its demand forecast and second in its business case analyses demonstrating that its gas distribution investments are prudent and in the public interest. Avista's pipeline investments will not fully depreciate for several decades and thus the Company and the Commission should carefully consider whether those investments will remain used and useful throughout the lifespan of the assets' lives. Investments in nonpipeline alternatives, discussed in detail in Section 3, can mitigate the risk of stranded assets and help the utility meet CPP compliance. The Company and Commission can also mitigate the risk of stranded assets by eliminating the Company's line extension allowance subsidy that incentivizes the expansion of the system.

C. Avista's Line Extension Policies are Incompatible with CPP Compliance

18 **Q**.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

19

20

21

22

23

#### What are line extensions?

A. Line extension allowances are ratepayer-funded subsidies that cover a portion of the cost of extending main and service lines to new customers. The purpose of a line extension allowance is to reduce the upfront investment cost for a prospective customer thereby increasing the number of overall customers. Line extension allowances are a fairly common practice among utilities across many jurisdictions, which were generally

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

established in previous decades to support the policy goals at the time. However, as I will explain in greater detail, public policy and energy markets have shifted significantly since those initial line extension allowance policies were adopted, and several states have recently begun to reexamine their line extension policies.

#### Q. Has Oregon recently reexamined gas utility line extension policies?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

A. Yes. The Oregon Public Utilities Commission recently ruled that Northwest Natural's line extension policy should be reduced, arguing that "a significant downward adjustment to the company's [line extension allowance] is appropriate."<sup>35</sup>

#### Q. Are other states reconsidering their line extension policies?

A. Yes. The California Public Utilities Commission recently eliminated line extension allowances for all customer classes,<sup>36</sup> and two gas utilities in Washington State, including Avista, recently agreed to phase out line extension allowances by 2025.<sup>37</sup> Both states found that the continuing to subsidize the expansion of the gas distribution system was incompatible with emissions reduction goals.

<sup>35</sup> UG 435, Order 22-388. Available at: <u>https://apps.puc.state.or.us/orders/2022ords/22-388.pdf at</u> <u>50</u>.

<sup>36</sup> Order Instituting Rulemaking Regarding Building Decarbonization, R.19-01-011, Decision 22-09-026 (Sept. 15, 2022). Available at: <u>https://docs.cpuc.ca.gov/PublishedDocs/</u> <u>Published/G000/M496/K987/496987290.PDF</u>.

<sup>37</sup> Available at: <u>https://apiproxy.utc.wa.gov/cases/GetDocument?docID=3215&year</u> =2022&docketNumber=220066; https://apiproxy.utc.wa.gov/cases/ GetDocument?docID=1433&year=2022&docketNumber=220053.

Q. Why did the Washington Utilities and Transportation Commission approve Avista's settlement agreement to phase out line extension allowances by 2025?

A. In a 2022 general rate case in Washington, Avista entered into a multi-party settlement in which the Company agreed to phase out its line extension allowances by 2025.<sup>38</sup> The Commission approved the settlement, finding that the phase out of line extension allowances, along with a requirement to consider non-pipeline alternatives in its gas distribution planning process, "will promote prudent planning and, in many ways, will aid Avista's compliance with the requirements of the [Climate Commitment Act]."<sup>39</sup>

#### **Q.** What are Avista's service and main line extension allowances in Oregon?

A. Avista provides new customers with what appears to be an unlimited allowance of service line interconnection in the public right-of-way, with an additional allowance of 40 feet of service line interconnection inside the property line. If the interconnecting customer requires a service extension beyond 40 feet, the customer must pay for the incremental connection cost.<sup>40</sup> The Company states that the average interconnection length was 52 feet in 2021 and 62 feet in 2022.<sup>41</sup>

Avista provides free main line extension as long as the estimated cost of the extension does not exceed three times the estimated annual gross revenue from

<sup>38</sup> Docket UE-220053, UG-220054, and UE-210854.

<sup>40</sup> Ex. Environmental Intervenors/103, EG DR 12.

1

<sup>&</sup>lt;sup>39</sup> Docket UE-220053, UG-220054, and UE-210854, Final Order 10/04 page 32, <u>https://apiproxy.utc.wa.gov/cases/GetDocument?docID=1433&year=2022&docketNumber=220</u>053.

<sup>&</sup>lt;sup>41</sup> Ex. Environmental Intervenors/104, CUB DR 02.

interconnecting customers.<sup>42</sup> In instances where the cost of the main extension exceeds three times the annual revenue from interconnecting customers, the interconnecting customer must pay the difference.<sup>43</sup>

The average cost Avista has paid to interconnect residential customers increased annually since 2017, from \$3,449 per customer to \$6,409 per customer in 2022,<sup>44</sup> which is significantly higher than the maximum allowance Avista provides in Washington: \$994 in 2023, \$524 in 2024, and \$0 after 2024.<sup>45</sup>

## Q. How many miles of main line extensions have the Company installed over the last five years?

A. The Company has installed an average of 25.6 miles per year of main lines over the last five years in its Oregon territory.<sup>46</sup> Over that period of time, residential customer counts increased about 1.0% and general customer counts increased 0.4%.<sup>47</sup>

Figure 4: Miles of New Mains Installed by Avista<sup>48</sup>

Year Installed	Length of Main Miles
2018	32.55
2019	26.58
2020	27.67
2021	19.86
2022	23.13

<sup>42</sup> Ex. Environmental Intervenors/105, EG DR 14 Attachment A.

<sup>43</sup> *Id*.

1

2

3

4

5

6

7

8

9

10

11

12

13

<sup>44</sup> Ex. Environmental Intervenors/106, CUB DR 05.

<sup>45</sup> <u>https://www.myavista.com/-/media/myavista/content-documents/our-rates-and-tariffs/wa/wa\_151.pdf</u>.

<sup>46</sup> Ex. Environmental Intervenors/107, EG DR 15.

<sup>47</sup> Ex. Environmental Intervenors/108, EG DR 43.

<sup>48</sup> Ex. Environmental Intervenors/107, EG DR 15.

#### **Q**. Has the utility changed its line extension forecast in response to State and Local policies?

It does not appear that the utility has modified its projections. Despite the Company A. acknowledging that electrification poses a risk to the utility's business, Witness Forsyth testified that the Company forecasts annual increases in customers from 2022 to 2024.<sup>49</sup> This increase translates to a \$20.96 million increase in rate base, including gas meter equipment and installation costs.<sup>50</sup>

#### 8 Q. Are line extension allowances consistent with the CPP and Oregon's decarbonization goals?

No. In UG-435, the Commission indicated that the CPP played a role in the change to A. line extension policies.<sup>51</sup> As discussed earlier in this testimony, there is no cost-effective method for eliminating fossil gas in the distribution system for meeting the state's emissions targets and for compliance with the CPP. Incentivizing new customer interconnection costs into rates will further entrench the gas distribution system that has no long-term path to decarbonization and that therefore presents significant stranded asset risk. Meanwhile, the utility's subsidies will continue to raise costs for ratepayers.

#### Q. Do line extension allowances pose a financial risk for customers?

#### A. Yes. As explained earlier in my testimony, gas distribution investments are long lived and are not fully depreciated for decades. Given the Company's emissions reduction

1

2

3

4

5

6

7

9

10

11

12

13

14

15

16

17

18

19

<sup>&</sup>lt;sup>49</sup> Avista/800, Forsyth/18.

<sup>&</sup>lt;sup>50</sup> Avista/600, Benjamin/13.

<sup>&</sup>lt;sup>51</sup> UG 435, Order 22-388. Available at: <u>https://apps.puc.state.or.us/orders/2022ords/22-388.pdf</u> at 50.

obligations under the CPP, and the emergence of cost-effective electric appliances, there is a strong likelihood that demand for gas will decline. This could be problematic for (remaining) gas customers for two reasons. First, there is a risk that the customer line extension allowance is not fully recovered. Inherent to a line extension allowance is an assumption about the annual demand from that customer. If the customer's expected demand does not fully materialize, or if the customer leaves the system before the Company has fully recouped its costs, then customers will not receive any financial benefit.

Second, there is a risk for stranded assets in a future that includes widespread electrification. In response to Northwest Natural's recently filed infrastructure-heavy IRP, Oregon PUC Staff commented that, "[r]ate impacts for line extensions or larger distribution system upgrades will be higher than expected if planned-for customers exit the gas system."<sup>52</sup>Adding new customers to the system may increase sales in the short term, but the expected acceleration of fuel switching (and increasingly efficient appliances) will slow gas sales revenues in the long run while fixed costs remain level or even increase. Given that the newest pipes have the longest depreciation schedules, they are the most likely to become stranded. A dwindling customers base will continue to pay for unused or underused assets, resulting in upward pressure on gas rates over the long term. The utility should be decreasing this risk by eliminating the line extension allowance and thereby encouraging reduced growth in the number of new customers and

<sup>52</sup> Docket LC 79, Staff Final Comments, at 14. Available at: https://edocs.puc.state.or.us/efdocs/HAC/lc79hac142022.pdf.

new infrastructure exposed to this risk. Encouraging the addition of new gas customers to the Company's system via line extension subsidies will only exacerbate these risks.

# Q. What is your recommendation with respect to the Company line extension allowances?

A. I recommend the Commission reduce service and main line extension allowances to \$0 going forward. Given the CPP and Oregon's broader efforts to decarbonize, the Commission should find that subsidizing the expansion of gas system is inconsistent with state decarbonization goals and financial risky for customers. Further, eliminating the Company's line extension allowance would create consistency with Avista's service territory in Washington.

11 **3.** <u>Non-Pi</u>

1

2

3

4

5

6

7

8

9

10

12

13

14

15

16

17

#### **Non-Pipeline Alternative Analysis**

#### A. **Overview of Non-Pipeline Alternatives**

#### Q. What are NPAs?

A. NPAs in the gas sector are the equivalent of the electric sector's "non-wires alternatives" and refer to activities or investments that delay, reduce, or avoid the need to build or upgrade traditional gas system infrastructure such as pipelines, storage, and peaking resources.<sup>53</sup>

- 18 Q. What technologies can serve as NPAs?
- 19 A. NPA solutions include a variety actions, strategies, programs, or technologies on both the
  20 demand-side and supply-side:

<sup>&</sup>lt;sup>53</sup> Advanced Energy Economy. *Non-Pipeline Alternatives (NPAs)*. 2022. Available at: <u>https://info.aee.net/hubfs/Sarah%20S%20uploads/NPAs.pdf.</u>

Demand-Side Solutions	Supply-Side Solutions
Targeted Demand Response	On-system Renewable Natural Gas Supply
Targeted Energy Efficiency	On-system Liquefied Natural Gas Peaking Storage
Heat Pumps	Compressed and Liquefied Natural Gas Trucking (Virtual Pipelines)
Thermal Storage	LNG Liquefaction Port Terminals
Other Electrification & Fuel Switching	
Behavior Change & Market Transformation	

Figure 5: Demand-Side and Supply-Side NPA Solutions<sup>54</sup>

An NPA can consist of a single demand- or supply-side resource, but more often it is a portfolio of resources. The specific costs and benefits of NPA opportunities will be dependent on the nature of the utility's pipeline system, capacity needs, types of customers, and policy goals.

#### Q. How can NPAs help achieve policy goals?

A. The increased use of NPAs can help achieve several policy goals:

- Cost reduction: NPAs can be less expensive than traditional utility capital investments such as pipeline replacements, leading to cost savings for ratepayers.
- Emissions reduction: To the extent NPAs reduce gas use and allow for opportunities for electrification and other approaches, they enable emissions reductions to help comply with regulations like the CPP and achieve decarbonization goals.
- Risk reduction: NPAs help address the risk of stranded assets associated with new investments in the gas distribution system. As electrification adoption accelerates and jurisdictions adopt stronger climate policies, further investments in the gas

1

<sup>&</sup>lt;sup>54</sup> ICF. What can we learn from New York's non-pipeline solutions ruling? 2019. Available at: <u>https://www.icf.com/insights/energy/non-pipeline-solutions</u>.

distribution system face the significant risk of becoming stranded as customers electrify, reduce their throughput and exit the gas system.

#### Q. What types of investments are NPAs being used to address?

A. NPAs can help meet emissions reduction goals, address supply constraints, as well as avoid capacity expansion and infrastructure replacement projects. For example, New York State Electric & Gas (NYSEG) was facing reliability concerns on very cold days in the Lansing area, leading the utility to issue a moratorium on new or expanded gas service in the area in 2015.<sup>55</sup> Following the utility's inability to obtain the necessary easements to implement a pipeline project to address the reliability issues, the New York Public Service Commission directed NYSEG to pursue NPA resources and ultimately approved a NPA portfolio in 2021 that includes heat pumps, energy efficiency, waste heat recovery, demand response, electrification, and customer education and outreach.<sup>56</sup> Also in New York, Central Hudson issued an RFP in 2019 for NPAs to avoid the costly replacement of leak-prone pipes and instead enable pipeline retirements, while National Grid issued a RFP in 2021 for demand-side NPAs, such as energy efficiency, weatherization, and electrification, to help address winter capacity constraints.<sup>57</sup>

<sup>&</sup>lt;sup>55</sup> New York Public Service Commission. Order Approving Petition for Non-Pipeline Alternative Projects, With Modifications. Case 17-G-0432. Jun. 21, 2021. Available at: https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={6F9010DA-F7B8-4DA6-BF3F-A8468AC0B57F}.

<sup>&</sup>lt;sup>56</sup> Id.

<sup>&</sup>lt;sup>57</sup> National Grid. "Request for Proposal." 2021. Available at: <u>https://www.nationalgridus.com/</u> media/pdfs/bus-partners/non-pipeline-alternatives/dny-rfp-sow-north-queens.pdf.

possible to eliminate unnecessary investments in the gas distribution system,"<sup>58</sup> and recommended that, "Future distribution system planning should include a cost benefit analysis for non-pipe alternatives."<sup>59</sup>

#### Q. Are states adopting frameworks for the evaluation of NPAs?

A. Yes. In 2022, the Colorado Public Utilities Commission adopted new rules related to gas planning.<sup>60</sup> Under the new rules, gas utilities are required to apply to the Commission for a certificate of public convenience and necessity (CPCN) for all infrastructure projects above \$12 million for utilities with 500,000 or more customers, \$10 million for utilities with between 50,000 and 500,000 customers, and \$5 million for utilities with less than 50,000 customers. As part of this CPCN application, gas utilities are required to present an analysis of NPAs, including the costs and benefits of those NPAs as well as

<sup>&</sup>lt;sup>58</sup> Docket LC 79, Final Staff Comments, at 14. Available at: <u>https://edocs.puc.state.or.us/efdocs/HAC/lc79hac142022.pdf</u>.

<sup>&</sup>lt;sup>59</sup> Docket LC 79, Final Staff Comments, at 15. Available at: <u>https://edocs.puc.state.or.us/efdocs/HAC/lc79hac142022.pdf</u>.

<sup>&</sup>lt;sup>60</sup> Colorado Public Utilities Commission. Decision C22-0760, Attachment A. Proceeding 21R-0449G, 2022. Available at: <u>https://www.dora.state.co.us/pls/efi/efi\_p2\_v2\_demo.show\_document?p\_dms\_document\_id=985243</u>.

employment impacts. Frameworks to evaluate NPAs have also been adopted in New York,<sup>61</sup> Rhode Island,<sup>62</sup> and California.<sup>63</sup>

#### **Q.** Has the Company established a framework for NPA analysis?

A. No. In response to discovery request EG-055, the Company states, "Avista has not had any non-pipeline investments in Oregon. Avista is currently working with the Energy Trust of Oregon to determine if a targeted demand side management effort can reduce or eliminate the need for some proposed reinforcements."<sup>64</sup> Although working with the ETO may be fruitful, the responsibility is on the utility to identify the least-cost, least-risk solutions for meeting its customer needs. Avista does not need to wait for an explicit requirement from the OPUC to consider NPAs, especially in light of the CPP, which requires aggressive emissions reductions from the utility.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

#### B. Applicability of Non-Pipeline Alternatives in this Rate Case

#### Q. What rate base additions does Avista propose and how are they categorized?

A. In this rate case, Avista proposes \$55.16 million in additions to its rate base<sup>65</sup> and divides capital investments into six categories:

<sup>&</sup>lt;sup>61</sup> NY Public Service Commission. "Order Adopting Gas System Planning Process." Cases 20-G-0131 and 12-G-0297 May 12, 2022. Available at: <u>https://documents.dps.ny.gov/</u>public/Common/ViewDoc.aspx?DocRefId={130B05B5-00B4-44CE-BBDF-B206A4528EE1}.

<sup>&</sup>lt;sup>62</sup> Rhode Island Public Utilities Commission, "National Grid's System Reliability Procurement 2021-2023 Three-Year Plan." Docket No. 5080, November 20, 2020. Available at: <u>http://rieermc.ri.gov/wp-content/uploads/2021/04/5080-ngrid-srp-2021-2023-three-year-plan11-20-2020v1.pdf</u>.

<sup>&</sup>lt;sup>63</sup> California Public Utilities Commission. General Order 177, December 1, 2022. Available at: <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/administrative-law-judge-</u> <u>division/documents/general-orders/go\_177\_gas\_infrastructure.pdf</u>.

<sup>&</sup>lt;sup>64</sup> Ex. Environmental Intervenors/109, EG DR 55.

<sup>&</sup>lt;sup>65</sup> Avista/600, Benjamin/10.

- **Customer Requested**: Includes new service connections, line extensions, and other investments associated with customer growth.<sup>66</sup>
- **Customer Service Quality and Reliability:** Includes customer service costs. In this rate case, costs in this category are primarily associated with technology investments related to business continuity, security, and self-service functionality.<sup>67</sup>
- Mandatory & Compliance: Includes costs related to compliance with Local, State and Federal regulations. The majority of these costs are associated with the on-going Aldyl-A pipe replacement program.<sup>68</sup>
- Asset Condition: Includes the replacement of assets at the end of their useful lives, such as pipelines, general plant investments, and enterprise technology.<sup>69</sup>
   Avista classifies some capacity upgrade and expansion costs in this category.<sup>70</sup>
- **Performance & Capacity:** Includes asset performance improvements and capacity expansion to meet design day needs.<sup>71</sup> In this rate case, enterprise technology investments account for over 75% of this category's costs.<sup>72</sup>

<sup>66</sup> Avista/600, Benjamin/12.

- <sup>68</sup> Avista/600, Benjamin/20-22.
- <sup>69</sup> Avista/600, Benjamin/24.
- <sup>70</sup> Avista/600, Benjamin/25.
- <sup>71</sup> Avista/600, Benjamin/30-31.
- <sup>72</sup> Avista/600, Benjamin/31.

<sup>&</sup>lt;sup>67</sup> Avista/600, Benjamin/14-15.

• Failed Plant & Operations: Includes unplanned work associated with asset replacements and repairs related to shallow pipes, customer requests, and leaks, among other work.<sup>73</sup>

#### **Q.** Please describe ER 3000, the Gas Reinforcement program.

A. Avista classifies ER 3000 capital projects under the Performance & Capacity category and investments, which typically serve to expand pipeline capacity for design day weather conditions. Common projects include "upsizing existing mains, looping existing gas mains, and installing new regulator stations."<sup>74</sup> Witness Benjamin testifies that the Company considers ER 3000 capital investments using load studies that measure system responses under design day weather conditions.<sup>75</sup> The Company identified a number of capacity expansion and reinforcement projects, totaling \$917,580 from October 2022 to December 2023.<sup>76</sup> Witness Benjamin testifies that these investments "are specifically designed to address severe system deficiencies. These projects are to prevent customers from losing gas service (and heat) during extreme cold weather."<sup>77</sup>

#### **Q.** Did the Company consider any alternatives to the ER 3000 investments?

A. No. Witness Benjamin states that, "[t]here is no alternative to providing for the capacity needs of our firm natural gas customers."<sup>78</sup> Avista appears to have considered only two

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

<sup>78</sup> Avista/601, Benjamin/8.

<sup>&</sup>lt;sup>73</sup> Ex. Environmental Intervenors/110, EG DR 071.

<sup>&</sup>lt;sup>74</sup> Avista/602, Benjamin/11.

<sup>&</sup>lt;sup>75</sup> Avista/602, Benjamin/14.

<sup>&</sup>lt;sup>76</sup> Avista/601, Benjamin/8.

<sup>&</sup>lt;sup>77</sup> Avista/602, Benjamin/15.

different funding levels for the capacity; a recommended solution with \$1.3 million in funding and an alternative solution "at a reduced funding level" of \$800,000.<sup>79</sup>

#### Q. Could non-pipeline alternatives have cost-effectively avoided ER 3000 investments?

A. A NPA analysis is critical in evaluating cost-effective solutions. Examples in New York show that not all investments may be cost-effective but can still contribute to load reductions as part of an overall solution that is cost-effective when factoring all measures. Since the Company has not conducted any analysis of alternatives – and only evaluated supply-side solutions - I cannot identify specific investments that could have been avoided. However, this underscores the current challenge in evaluating gas system investments; due to the inherent informational asymmetry in utility regulation, it is not possible for external parties to determine whether investments into demand reduction, demand response, and other measures can resolve performance and capacity constraints, and can do so more cost effectively.

#### Q. Please describe UG-288, Order 16-109.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

A. In Order 16-109, the Commission required Avista to conduct and present a comprehensive analysis of its distribution system reinforcements and expansions in its IRP and subsequent rate case. The Commission ruled that, "Such analyses should provide: (1) a comprehensive cost-benefit analysis of whether and when the investment should be built; (2) evaluation of a range of alternative build dates and the impact on reliability and customer rates; (3) credible evidence on the likelihood of disruptions based on historical experience; (4) evidence on the range of possible reliability incidents; (5)

<sup>&</sup>lt;sup>79</sup> These values appear to reference the entirety of Avista's service territory. Avista/602, Benjamin/14.

evidence about projected loads and customers m the area; and (6) adequate consideration of alternatives, including the use of interruptibility or increased demand-side measures to improve reliability and system resiliency."<sup>80</sup>

Q. Are the Commission's existing standards established in UG-288, Order 16-109 sufficient?

- A. Not anymore. The Commission should consider building on the 16-109 standards.
   Although the 16-109 requirements are directed at distribution system reinforcements and expansions, Avista identified no projects in this rate case that met the criteria.<sup>81</sup>
   Moreover, Avista has not developed a NPA framework,<sup>82</sup> and has provided no indication that it will consider NPAs even if a future project meets the criteria.
  - C. Recommendations and NPA Framework

#### **Q.** Please briefly summarize your NPA recommendations?

- A. I recommend that the Commission expand requirements first established in rate case UG-288, Order 16-109 to require an NPA analysis for certain investments. Specifically, I recommend that the Commission:
  - Require a NPA analysis, first in the IRP, and then in the subsequent rate case review, for all natural gas distribution system reinforcements and expansion projects that exceed the threshold identified in recommendation 2.
  - Set the NPA analysis threshold to the lower of 0.2% of net plant in service or \$1 million.

- <sup>81</sup> Avista/600, Benjamin/27.
- <sup>82</sup> Ex. Environmental Intervenors/109, EG DR 055.

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

<sup>&</sup>lt;sup>80</sup> UG-288 Order 16-109, at 14.

- 3. Explicitly identify electrification as a resource that is available as part of a nonpipeline alternative.
- 4. Explicitly require the inclusion of hard-to-quantify impacts (costs and benefits) as part of the NPA evaluation.
- **Q**.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

#### What should be considered in a NPA analysis?

A. I would expect that the Company create a NPA framework that identifies a robust set of demand- and supply-side resources, identify portfolios of resources that can defer, reduce, or eliminate the need for the pipeline investment, and compare the costs and benefits of those portfolios to the pipeline investment. I would also expect the Company to identify hard-to-quantify impacts, and impacts to environmental justice communities, as considerations in its assessment and decision-making. For larger projects, I would expect the Company to issue a RFP for NPA resources.

#### Q. What projects should the NPA threshold apply to?

A. The NPA threshold should apply to planned activities addressing the same need in a concentrated geographic locality. Capacity expansion projects, especially at the distribution level, can consist of a number of small projects. The testimony of witness Benjamin provides a list of over 40 projects within ER 3000 across Avista's service territory, totaling an estimated \$1.3 million,<sup>83</sup> and several high priority projects are located within Medford. <sup>84</sup> However, I recommend that the NPA threshold should apply to a portfolio of projects, rather than just an individual project. Demand-side non-pipeline

<sup>&</sup>lt;sup>83</sup> Avista/602, Benjamin/13.

<sup>&</sup>lt;sup>84</sup> Avista has not provided a detailed cost breakdown by project ID. There are more than a dozen projects in Medford.

alternatives, such as energy efficiency measures, are typically an amalgamation of small projects that provide benefits to a wider geographic area. A portfolio of demand reduction projects in one location could avoid multiple pipeline investments, therefore, it is logical to aggregate multiple similar projects that serve the same purpose into one portfolio.

The threshold should apply to planned projects within the same geographic locality, such as the Company's planned investments are inter-related. A portfolio of energy efficiency measures implemented in one area of Avista's service territory may not provide any demand-reduction benefits in a different part of Avista's territory, much like a capacity expansion project in one corner of the Company's service territory is unlikely to resolve constraints in another corner.

# Q. Why do you recommend setting the NPA threshold at the lower of 0.2% of net plant in service or \$1 million?

A. The purpose of the threshold is to exclude smaller projects where examining NPA would not be cost-effective but not create a threshold so large that it excludes projects that could be served by a NPA solution. A 0.2% net plant is service threshold is roughly equivalent to \$712,000 and scales with the size of Avista's system. The net plant in service threshold percentage is the same threshold stipulated Illinois Administrative Code Section 285.6100, which requires supporting work papers and reports for all rate base additions exceeding the threshold.<sup>85</sup>

<sup>85</sup> Ill. Admin. Code 83 § 285.6100.

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

#### **Q**. Would any projects in this rate case have been subject to a 0.2% net plant in service threshold?

A. The projects in Medford, due to their volume and concentration, may have reached the threshold, however, Avista did not provide project-specific costs and therefore, it is unclear whether the portfolio of expansion and reinforcement projects would have met my recommended threshold. However, this criterion could be relevant in subsequent rate cases, especially as the utility faces mounting pressures to decarbonize pursuant to the CPP. Demand-side NPAs that avoid a pipeline uprate, for example, would have the dual benefit of helping Avista meet CPP compliance while preventing investments in assets that may become stranded.

#### Q. Why do you recommend the Commission explicitly identify electrification as a resource that is available as part of a non-pipeline alternative?

A. Avista is a gas-only utility in Oregon and, without explicit Commission direction, is unlikely to promote solutions - even cost-effective solutions that are in the public interest - that erode demand for its product. The Commission has recognized this need before, when it charged the Energy Trust of Oregon with developing and implementing energy efficiency and renewable energy programs both of which are in the public interest but that involve reduced volumetric sales and require corresponding adjustments to the utility's business model.

Q.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

### Why do you explicitly recommend the consideration and inclusion of hard-toquantify impacts?

Avista will conduct a benefit-cost analysis of the NPA solution to determine if it is costeffective relative to the pipeline project. However, as this Commission knows, there are

DIRECT TESTIMONY OF BRADLEY CEBULKO UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

several known hard-to-quantify costs and benefits that should be acknowledged and considered in decision-making. For example, if a project occurs in, or would provide benefits to, disproportionately impacted communities that should be considered as part of the decision-making process. A benefit cost test is a tool, but only one tool, that should be used for decision-making.

4.

#### Community Climate Investment Cost Recovery

### Q. Earlier you mentioned that Avista is proposing to rely on CCIs. How does the Company propose to recover the costs to acquire CCIs?

A. Avista is not proposing to recover the costs of CCI credits through this or future rate cases. Rather, the Company states that it intends to seek recover of the costs to acquire CCIs through a new tariff rider.<sup>86</sup>

#### **Q.** Is it appropriate for the utility to recover the costs of CCIs through a tariff rider?

A. No, for two reasons. First, a rider allows Avista to bypass the regulatory lag that normally separates their investments and expenses from ratepayer cost recovery. Regulatory lag is valuable as a cost containment tool and is recognized in regulatory theory for imposing financial discipline on utility decision making.<sup>87</sup> A rider should only be used for costs that are large, volatile, and largely beyond the control of the utility. I am skeptical that the costs for CCIs could be considered large or volatile, especially in comparison to other utility riders, such as the Company's Purchase Gas Allowance rider. CCI costs are also

<sup>86</sup> Ex. Environmental Intervenors/111, EG DR 30 Supplemental.

<sup>&</sup>lt;sup>87</sup> Alternative Rate Mechanisms. Available at: <u>https://pubs.naruc.org/pub/FA86C519-AF31-D926-BE12-2AC7AE0CD8D6</u> at 10.

not beyond the control of the utility, as Avista has multiple pathways for complying with the CPP and is not obligated to purchase CCIs.

Second, the use of riders to recover costs through separate dockets than the rate case reduces the Commission's ability to holistically assess the utility's investments and strategies in its rate case. The Company will have to make certain investments, at least in part, for compliance with the CPP. By proposing to remove a core part of the Company's compliance pathways from review during the rate case, the Commission will not be able to holistically assess the utility's decision-making and consideration of alternatives compliance options.

## Q. What is your recommendation for the Commission's treatment of CCI cost recovery?

I recommend the Commission clarify in its final order that it will only consider CPP compliance cost recovery, including costs to acquire CCIs, through a rate case.

#### 5. <u>Summary Of Recommendations To The Commission In This Case</u>

#### Q. Can you please summarize your recommendations to the Commission?

A. Yes, my recommendations are summarized below.

- Service and Main Line Extension Allowances: I recommend the Commission set service and main line extension allowances to \$0 going forward.
- Non-Pipeline Alternatives: I recommend that the Commission require an NPA analysis for certain capital investments, first analyzed in the Company's Integrated Resource Plan (IRP) and subsequently in the business case when the Company seeks cost recovery in a general rate case. Specifically, I recommend that: (1) NPA analysis apply to portfolios of natural gas distribution system

1reinforcements and expansion projects within the same geographical locality, (2)2NPA analysis apply when project portfolios meet a the lesser threshold of 0.2% of3net plant in service or \$1 million, (3) The Commission explicitly define4electrification as a resource to be evaluated in NPA analyses, and (4) Distinguish5reliability projects from capacity projects to allow qualitative factors in the6evaluation of reliability solutions.

- Community Climate Investments: I recommend that the Commission clarify in its final order that it will only consider CPP compliance cost recovery, including costs to acquire CCIs, through a rate case.
- 10

7

8

9

#### Does this conclude your testimony?

11 A. Yes.

**Q**.

#### WITNESS QUALIFICATION STATEMENT

NAME: Brad Cebulko

**EMPLOYER:** Strategen Consulting

TITLE: Senior Manager

ADDRESS: 10265 Rockingham Dr Ste 100-4061, Sacramento, CA 95827

**EDUCATION:** MPA, Environmental Policy, University of Washington BA, Political Science, Colorado State University

**EXPERIENCE:** Leads Strategen gas transition practice on Strategen's consulting where he works with governmental clients, non-governmental organizations, and consumer advocates in regulatory proceedings and at legislatures across the country. Managed or supported projects for numerous client engagements related to issues in this proceeding including line extension allowances and non pipeline alternatives. Worked for Washington Utilities and Transportation Commission for 8 years; the first 3 as a regulatory analyst in the Conservation and Energy Planning Section of Staff and for 5 years as a policy advisor to the commissioners. Testified before the Oregon Public Utilities Commission (Docket No. UE 299), the Washington Utilities and Transportation Commission (Docket Nos. UE-140188/UG-140189, UE-150204/UG-150205, UE-151871/UG-151872, UE-220066/UG-220067/UG-210918, UE-220053/UG-220054), Illinois Commerce Commission (Docket Nos. 23-0066, 23-0068/23-0069), Michigan Public Service Commission (Docket No. U-21148), Massachusetts Department of Public Utilities (Docket No. 22-32), and Minnesota Public Utility Commission (Docket No. 21-138). Represented numerous clients by drafting written comments, providing technical assistance, presenting oral comments and participating in technical workshops on a wide

range of electric and gas proceedings at utilities commissions in Washington, Oregon,

Minnesota, Illinois, Michigan, and New York.



Senior Manager



### Contact



**Location** Vashon, Washington

Email bcebulko@strategen.com

**Phone** +1 (510) 296-8481

### **Education**

MPA Environmental Policy University of Washington 2012

BA Political Science Colorado State University 2006

#### STRATEGEN.COM

Brad leads Strategen's gas utility transition practice. He also provides expert testimony on numerous utility regulation topics including gas utility decarbonization strategy, electric and gas long term planning, fuel costs, energy efficiency and conservation programs, low-income ratepayer issues, and greenhouse gas regulation policy. He has prior experience with the Washington Utilities and Transportation Commission developing policy initiatives through Commission orders, policy statements, and rulemakings.

### **Work Experience**

#### Senior Manager

Strategen / Berkeley, CA / 2021 - Present

- + Leads Strategen's gas transition practice, which includes regulatory and legislative strategy, prudence reviews, and infrastructure planning.
- + Works with state regulatory commissions, consumer advocates, non-profits, and other clients to advance the public interest in regulatory decision-making.
- + Leverages subject matter expertise in gas decarbonization, utility regulation, electric and gas resource planning, fuel costs, energy efficiency, and low-income ratepayer issues.

#### Senior Policy Advisor For Energy Strategy

Washington Utilities and Transportation Commission / Olympia, WA / 2016 – 2021

- + Advised the Commissioners on utility regulation and integrated resource planning.
- + Led major Commission policy initiatives through Commission orders, policy statements, and rulemakings, including developing rules for the Clean Energy Transformation Act.
- + Served on the WA Department of Commerce's Electrification of Transportation Program Advisory Committee and Chair of the Staff Subcommittee on International Relations at NARUC.

#### **Regulatory Analyst**

Washington Utilities and Transportation Commission / Olympia, WA / 2013-2016

- + Testified before the commission in suspended utility filings and general rate case proceedings.
- + Led Commission Staff's review of natural gas integrated resource plans and energy efficiency filings.

Senior Manager



#### **Expert Testimony**

Northern Illinois Gas Company Proposed General Increase in Rates and Revisions to Other Terms and Conditions of Service (DKT: 23-0066) on Behalf of Environmental Law & Policy Center, Environmental Defense Fund, Natural Resources Defense Council, and Illinois State Public Interest Research Group, Inc Direct and Rebuttal Testimony on capital expenditures, line extension allowances, non-pipeline alternatives, gas system planning, performance metrics, and rate design. <u>Case Details | Direct Testimony | Rebuttal Testimony</u>

The Peoples Gas Light and Coke Company 2023 Proposed General Increase in Rates and Revisions to Other Terms and Conditions of Service (DKT: 23-0068 and 23-0069) on Behalf of Environmental Law & Policy Center, Environmental Defense Fund, Natural Resources Defense Council, and Illinois State Public Interest Research Group, Inc.

Direct testimony on capital expenditures, line extension allowances, non-pipeline alternatives, gas system planning, performance metrics, and rate design. Case Details | Direct Testimony

Puget Sound Energy 2022 Electric and Gas General Rate Case (DKT: UE-220066, UG-220067, and UG-210918) On Behalf of the Energy Project Response Testimony on Gas and Electric Performance Metrics and Electric Time-of-Use Rate Pilot. Case Details | Response Testimony | Settlement Testimony

Liberty Utilities RNG Program (DKT 22-32) On Behalf of Sierra Club Voluntary Renewable Natural Gas Program Testimony <u>Case Details | Direct</u>

Avista 2022 General Rate Case (DKT UE-220053 & UG-220054) On Behalf of the Energy Project Settlement Testimony on Performance Metrics Case Details | Direct

PacifiCorp 2022 General Rate Case (DKT UE 399) On Behalf of Vitesse LLC Voluntary Renewable Energy Tariff Testimony <u>Case Details | Direct</u>

Consumers Energy 2022 Natural Gas General Rate Case (DKT U-21148) On Behalf of Michigan Environmental Council, NRDC, and Sierra Club Natural Gas Prudence Testimony Case Details | Direct

Xcel Energy, Minnesota Energy Resources Corp, CenterPoint Energy (DKT: 21-138) On Behalf of Minnesota CUB Natural Gas Prudence Testimony Case Details | Direct

Senior Manager



### **Expert Testimony (continued)**

Puget Sound Energy Proposed Leasing Program (DKT: UE-151871/UG-151872) On Behalf of Washington UTC Staff Utility Service Offerings Case Details | Direct

Avista 2015 General Rate Case (Dockets UE-150204/UG-150205) On Behalf of Washington UTC Staff General Rate Case Case Details | Direct

Avista 2014 General Rate Case (Dockets UE-140188/UG-140189) On Behalf of Washington UTC Staff General Rate Case Case Details | Direct

Senior Manager



#### **Selection of Relevant Experience**

Nonpipeline Alternative Analysis Framework for the Colorado Public Utilities Commission on Behalf of Lawrence Berkeley National Laboratory

Through a collaboration with Lawrence Berkeley National Laboratory, Strategen is providing technical assistance to the Colorado Public Utilities Commission as it considers a framework for NPAs as part of the state's new Gas Infrastructure Planning requirements.

#### Comments to the Oregon Public Utilities Commission on Northwest Natural Gas Company's 2022 Integrated Resource Plan on Behalf of Coalition of Climate Advocates <u>Natural Gas IRP</u>

Provided technical support to a coalition of climate-focused organizations, and frontline community organizations, on the gas utility's plans for meeting future customer demand while complying with Oregon and Washington emissions reductions requirements.

#### National Fuel Gas Distribution Corporation 2023 Long-Term Gas System Plan on Behalf of Sierra Club <u>Comments on Electrification Assumptions</u>

Provided comments on NFG's technological and cost assumptions for various electrification technologies, cost basis for the crossover temperature for heat pumps, and electrification adoption curves. Strategen then proposed several recommendations for adjustments that NFG could make in this proceeding, or future LTPs, to better represent the technical capacity and emission reduction potential of electrified heating systems.

#### Gas Rate Impact Analysis on Behalf of Advanced Energy Economy (2023) White Paper

Quantified the impact of gas utility capital improvement projects on customer rates for two gas utilities, one in Michigan and the other in Nevada. The White Paper will consider the cost impacts over a range of load growth scenarios, including one that assumes a customer count decrease.

#### White Paper on the Implications of the Gas Utility Decarbonization Transition: An Analysis of Southwest Gas Company on Behalf of SWEEP and GridLab (2022) White Paper

Developed a white paper that examines the cost-effectiveness and feasibility of electrification, energy efficiency, and alternative fuels as decarbonization solutions with a focus on Southwest Gas Company in Arizona. The White Paper will also examine how to mitigate negative impacts to low-income customers if a gas utility is losing customers due to electrification.

## White Paper on the Relationship of Gas and Electricity Prices in New England on Behalf of Sierra Club (2023)

#### White Paper

Co-authored a white paper that provides background and context on the implications of recent electricity price spikes in New England and the relationship between natural gas prices and electricity prices.

Senior Manager



#### Selection of Relevant Experience (continued)

Nevada Gas Utility Decarbonization Planning 2022 Legislative Proposals on Behalf of GridLab and **SWEEP** 

Technical and Policy Advice

Providing a coalition of climate-focused advocates with technical and policy guidance on legislation for aas planning requirements

#### Presentations to Western States on Planning for Decarbonizing Gas Utilities on Behalf of Advanced Energy Economy (2022-2023)

#### Presentations

Leading Strategen's collaboration with AEE to develop a series of presentations for Western State Public Utility Commission commissioners on how to plan for the decarbonization transition of natural gas utilities

#### Designing Building Electrification Incentives for Washington State on Behalf of Climate Solutions (2022) Technical and Policy Advice

Developed funding scenarios that would allow Washington State to meet building decarbonization targets. Solutions focused on rebates for high-efficiency electric appliance retrofits and communitycentered weatherization programs.

Washington Utilities and Transportation Commission Proceeding to Develop a Policy Statement Addressing Alternatives to Traditional Cost of Service Rate Making, (DKT: U-210590) On Behalf of The Energy Project **Policy Statement** Supported client, the low-income advocate in Washington, on comments on regulatory goals, outcomes,

and performance metrics.

Case Details | Comments

Comments to the Minnesota Public Utilities Commission on Natural Gas Planning (DKT: 21-135) On Behalf of Citizens Utility Board of Minnesota (2022) Comments

Provided technical and policy guidance to the Minnesota Commission on how gas planning, operational changes, and risk sharing can help protect customers from future natural gas price spikes like that occurred during February 2021.

#### Puget Sound Energy 2023 Natural Gas Integrated Resource Plan

#### Natural Gas IRP

Supported confidential client's review of the Company's development of the inputs and assumptions that will be used in the IRP.

Puget Sound Energy 2023 Electric Integrated Resource Plan Update

#### Electric IRP

Supported confidential client's review of the Company's development of the inputs and assumptions that will be used in the IRP.

Senior Manager



**Selection of Relevant Experience (continued)** 

Michigan Public Service Commission, Renewable Natural Gas Study Workgroup (DKT: U-21170) On Behalf of Michigan Environmental Council, NRDC, and Sierra Club Workgroup Supported clients' review of the development of the study including submitting comments to the PSC.

Kentucky Utilities and Louisville Gas and Electric Company General Rate Case (DKT: 2020-00350) On Behalf of the Kentucky Public Service Commission General Rate Case Supported the Kentucky PSC evaluate testimonies on PURPA rates and set new rates for the utilities. Case Details | Final Order

Minnesota Power 2021 Integrated Resource Plan (DKT: 21-33) On Behalf of Citizen Utility Board of Minnesota Electric IRP Supported client's review of the Company's IRP. Case Details | Comments

Promoting Renewable Natural Gas in Washington State, A Report to the Washington State Legislature December 2018

Report to the Washington state Legislature

Supported the authors of the report from the perspective of the Washington state Utilities and Transportation Commission.

Report

JURISDICTION:	Oregon	DATE PREPARED	: 05/15/2023
CASE NO:	UG 461	WITNESS:	Jeff Webb
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Paul Good
TYPE:	Data Request	DEPT: Natural	Gas Delivery
<b>REQUEST NO.:</b>	EG-012	TELEPHONE:	(208) 769-1368
		EMAIL:	Paul.Good@avistacorp.com

#### **REQUEST:**

Please itemize all costs that Avista incurs to build a new service line to connect a new residential building to gas utility service. For each itemized cost please state who pays for the cost—ratepayers, the new customer(s), or Avista Utilities' shareholders.

#### **RESPONSE:**

The cost associated with a new service that Avista incurs will vary greatly depending on many factors from the location/municipality, the length of the new service, to the physical location of existing facilities. For this reason, the Company would need additional information on the hypothetical new service before it could provide an estimated itemized cost. In general, costs incurred to build a new service may include the following items:

- Service, \$14.69 per foot (pipe, labor, ditching)
- Service, \$10.36 per foot when customer provides ditching

In terms of who pays for the costs of a new service, it is either all customers and/or the new customer, depending on the nature of the new service and applicable line extension allowance provided to the customer pursuant to the Company's Rule No. 15 and 16, as approved by the OPUC. For example, for a new residential or general service connection where the Company already has a main installed, it will install at its own expense a service pipe up to 40 feet in length. In this case, the cost of the extension is recovered all customers. In instances where the length of the service pipe is beyond 40 feet when a main exists, the new customer must pay for the installed cost of the excess length of the service pipe and the costs to install the service pipe up to 40 feet in length is recovered from all customers.

JURISDICTION:OregonCASE NO.:UG 461REQUESTER:CUBTYPE:Data RequestREQUEST NO.:CUB - 002

DATE PREPARED: 4/13/2022WITNESS:Joe MillerRESPONDER:Joe MillerDEPT:RegulatoryTELEPHONE:(509) 495-EMAIL:joe.miller(

Joe Miller Joe Miller Regulatory Affairs (509) 495-4546 joe.miller@avistacorp.com

#### **REQUEST:**

Refer to Avista's Tariff Rule No. 16, which states "Upon application, the Company will furnish and install at its own expense a service pipe of suitable capacity from its gas main to the property line of property abutting upon any public street, highway, alley, lane or road along which it already has or will install street mains, and will install, at its own expense, a further extension of 40 feet on the private property...".

a) Please provide a narrative explanation of the economic justification for installing up to 40 feet of pipe to connect customers to the gas main at the Company's expense.

b) Please provide the OPUC proceeding which established the 40 feet of service pipe limit.

c) Please provide the average length of pipe that Avista installs to connect new residential customers to their system in 2021 and 2022.

#### **RESPONSE:**

The Company purchased the Oregon jurisdiction from CP National in 1991. Rules 16 was approved during the time CP National owned the Oregon jurisdiction and Avista has maintained these tariffs since that time. Therefore, the Company is unable to provide documentation supporting the economic justification or OPUC proceeding which established the up to 40 feet of service pipe condition.

The average length of total service pipe that Avista installed to connect new residential customers to the system in 2021 and 2022 is approximately 52 and 62 feet respectively. This footage is inclusive of the service pipe from the gas main to the property line and any additional footage onto the private property as prescribed within Rule 16.

Environmental Intervenors/105 Cebulko/1

P.U.C. OR. No. 5

Original Sheet 15

AVISTA CORPORATION dba Avista Utilities

#### RULE NO. 15

#### GAS MAIN EXTENSIONS

Extensions of gas distribution mains exclusive of meters, regulators and service lines, necessary to furnish permanent gas service to applicants, will be made by the Company in accordance with the following provisions:

A. General

The Company will construct, own, operate and maintain gas distribution main extensions only along public streets, roads and highways which the Company has the legal right to occupy, and on public lands and private property across which rights-of-way satisfactory to the Company may be obtained without cost to the Company.

- B. Extensions to Individual Applicants
  - 1. Free Extension

Gas main extensions will be made by the Company, provided the estimated total cost of the required extension from existing distribution mains to the premises to be served does not exceed three (3) times the estimated annual gross revenue as determined by the Company to be derived from bonafide applicants for such service; provided, however, that the request for service shall be of such permanence as to warrant the expenditure involved.

- 2. Extension Beyond Free Length
  - a. An extension where the estimated cost is more than three (3) times the estimated annual gross revenue shall be constructed by the Company upon fulfillment of the following conditions:
    - (1) The execution of a main extension agreement.
    - (2) The applicant or group of applicants shall advance in cash to the Company an amount equal to the difference between the cost of the extension and three (3) times the estimated annual gross revenue times the number of applicants.

(continued)

Advice No. 08-02-G Issued March 31, 2008 Effective For Service On & After April 1, 2008

P.U.C. OR. No	. 5
---------------	-----

Original Sheet 15A

AVISTA CORPORATION dba Avista Utilities

<ul> <li>RULE NO. 15 (continued)</li> <li>GAS MAIN EXTENSIONS</li> <li>b. Upon completion of an extension, where an advance is made based on the estimated cost thereof, said advance will be adjusted only where the actual cost is found to be less than the estimated cost.</li> <li>c. The amount advanced hereunder will be subject to refund, without interest, as provided for in Section B.3.</li> <li>3. Method of Refund</li> <li>The amount advanced in accordance with Section B.2. will be subject to refund in the following manner:</li> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable and the advance and the company makes and the company make and the company makes and the company makes and the</li></ul>				
<ul> <li>b. Upon completion of an extension, where an advance is made based on the estimated cost thereof, said advance will be adjusted only where the actual cost is found to be less than the estimated cost.</li> <li>c. The amount advanced hereunder will be subject to refund, without interest, as provided for in Section B.3.</li> <li>3. Method of Refund The amount advanced in accordance with Section B.2. will be subject to refund in the following manner: <ul> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable </li> </ul></li></ul>				
<ul> <li>on the estimated cost thereof, said advance will be adjusted only where the actual cost is found to be less than the estimated cost.</li> <li>c. The amount advanced hereunder will be subject to refund, without interest, as provided for in Section B.3.</li> <li>3. Method of Refund The amount advanced in accordance with Section B.2. will be subject to refund in the following manner: <ul> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable</li></ul></li></ul>			GAS MAIN EXTENSIONS	
<ul> <li>interest, as provided for in Section B.3.</li> <li>3. Method of Refund The amount advanced in accordance with Section B.2. will be subject to refund in the following manner: <ul> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable</li></ul></li></ul>		C	on the estimated cost thereof, said advance	will be adjusted only
<ul> <li>The amount advanced in accordance with Section B.2. will be subject to refund in the following manner:</li> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable</li> </ul>				bject to refund, without
<ul> <li>refund in the following manner:</li> <li>a. A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable</li> </ul>	3.	Method	of Refund	
extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable				B.2. will be subject to
as their individual advances bear to the total joint advance.		e e r c a fi e fi p a	extension for which all advance payments h equal to the amount by which three (3) time evenue exceeds the cost of a construction sustomer. Where there is a series of exter an advance is still refundable, and the Comp ree extensions with excess allowances (thr estimated annual revenue times the number cost of construction to serve), refunds will be each of such advances which remain refunc- irst series from the original point of supply. Parties make a joint advance on the same e amounts will be distributed to these parties in	ave not been refunded, s the estimated annual to serve such additional nsions, on any of which pany makes succeeding ee (3) times the r of applicants less the e made to repay in turn dable beginning with the When two or more xtension, refundable in the same proportion
<ul> <li>No refunds will be made by the Company on advances, or portions thereof, covering extensions which have been in service more than five (5) years.</li> </ul>		tl	hereof, covering extensions which have be	
c. Any assignment by a customer of his interest in any part of a cash advance made as above which at the time remains unrefunded, must be made in writing and endorsed by the Company showing the amount still unrefunded, and a copy of such assignment bearing the signature of both the assignor and assignee must be filed with the Company before it shall be effective and binding upon the Company.		a n a s C	advance made as above which at the time r nust be made in writing and endorsed by th amount still unrefunded, and a copy of such signature of both the assignor and assignee Company before it shall be effective and bir	emains unrefunded, le Company showing the assignment bearing the must be filed with the
(continued)			(continued)	
Advice No.08-02-GEffective For Service On & AfterIssuedMarch 31, 2008April 1, 2008				

State & Federal Regulation

P.U.C. OR. No	. 5
---------------	-----

Original Sheet 15B

AVISTA CORPORATION dba Avista Utilities

		E NO. 15 (continued)	
	GAS	MAIN EXTENSIONS	
	possession of	the cash advance which shal the Company after the termir d for shall become the proper	nation of the refunds as
C. Main B	Extensions to Serve Sul	bdivisions	
1.	Advances		
	constructed, or applications fo estimated cost however, the p Company estir other provision months if the s that he had red promptly with o provided furthe contract for the months all amo refundable.	n main extensions to and with whed and maintained by the r service by ultimate users or of such extensions is advance bayment of the portion of such mates would be refunded with is of this extension rule shall subdivider-builder furnishes to ceived state and local authori construction and that he has a er that the subdivider-builder extension, to pay immediate bunts not previously advance at the end of such six-month p such amounts not previously e.	Company in advance of hly when the entire ced to the Company; n advance as the hin six months under be postponed for six the Company evidence zations to proceed adequate financing, and agrees in writing, in his ely at the end of six d which are not then period, the Company
	provided in Se made by the C Company and the Company a	dvanced will be subject to refection C.2., provided, however company in excess of the amore further provided that no reparate after a period of five (5) years the extension on which the ac	r, no repayment will be ount advanced to the yments will be made by a from the date of
2.	Method of Refund		
	may be directly	oulated hereunder for such pe y connected to such an exten after the date of first	
		(continued)	
Advice No. Issued	08-02-G March 31, 2008	Effectiv April 1,	ve For Service On & After 2008

P.U.C. O	)R. No. 5		Original Sheet 15C
	AVISTA dba A	CORPO vista U	
		RI	ULE NO. 15 (continued)
		GA	AS MAIN EXTENSIONS
	servia	ce or as	s soon thereafter as practicable on the following basis:
	(1)		main extension built to serve a subdivision shall serve a ed number of lots.
	(2)	buildi Comp portio the su	n any individual lot shall have a permanent and complete ing constructed thereon, occupied by one of the pany's bonafide customers, the Company will refund that on of the sum advanced which bears the same relation to um advanced as one lot bears to the total number of lots e subdivision.
	(3)	exten accor	Ild a connection for service be made to the main nsion other than to serve one of the lots determined in rdance with Section C.2.a.(1) above, then the refund sions of Section B.3.a. will apply.
	(4)		n <u>multi-family</u> dwelling units are included within a ivision, the refund for these units will be provided as vs:
		(a)	The first occupied apartment in each multi-family unit will qualify for a refund as if it were one lot, on the basis described in Section C.2.a.(2) above. Each remaining apartment, within that unit, as occupied thereafter would quality for a refund of 25% of that amount.
		(b)	After full occupancy, the refund that would be due for the number of lots upon which the multi-family units are constructed will be made. Refunds in excess of the number of lots may be made provided the total amount advanced for the subdivision is not exceeded.
D.	Extensions for Temp	orary c	or Speculative Business
	Extensions for temporter temporary service ru	•	ervice or speculative business will be made under the
		10.	(continued)
	dvice No. 08-02-G sued March 31, 200	)8	Effective For Service On & After April 1, 2008

State & Federal Regulation

P.U.C. OR. No. 5

Original Sheet 15D

AVISTA CORPORATION dba Avista Utilities

#### RULE NO. 15 (continued)

#### GAS MAIN EXTENSIONS

E. Exceptional Cases

If adherence to these rules should be deemed impractical or impossible by either party, the Company or the applicant, prior to commencing construction or installation, may petition the Commission for a special ruling or for the approval of special conditions that have been mutually agreed upon.

Advice No. 08-02-G Issued March 31, 2008

Issued by Avista Utilities By Kelly Norwood, Vice President, EG\_DR\_014 Attachment A Effective For Service On & After April 1, 2008

P.U.C. OR. No. 5

Original Sheet 16

AVISTA CORPORATION dba Avista Utilities

#### RULE NO. 16

#### SERVICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES

Extensions of gas distribution service pipes necessary to furnish permanent gas service to applicants, and installation of facilities on customers' premises will be in accordance with the following:

- A. Service Pipes for Residential and General Service
  - Upon application, the Company will furnish and install at its own expense a service pipe of suitable capacity from its gas main to the property line of property abutting upon any public street, highway, alley, lane or road along which it already has or will install street mains, and will install, at its own expense, a further extension of 40 feet on the private property, or as much of such extension as may be necessary to reach a meter location that is satisfactory to the Company. The Company will install that portion of each service pipe in excess of the portion installed at the Company's expense inside of the property line, subject to an advance to be paid by the applicant as set forth below.
     In cases where the applicants' building is located a considerable distance from
    - 2. In cases where the applicants' building is located a considerable distance from the main, or where service is taken off a high pressure transmission main, or where a hazard or obstruction such as plowed land between the gas main and the applicant's building prevents the Company from prudently installing a service pipe, the Company may, at its discretion, waive the above. In such cases, the meter may be located at or near the applicant's property line, as close as practical to the Company's main at a location agreed upon by the customer. Where these conditions exist, the Company will install, at its own expense, service pipe only to the meter location.
    - 3. Service Pipes Exceeding the Free Length When the length of service pipe on the applicant's premises, necessary to reach the approved meter location, exceeds the free allowance as stated above, the applicant will have the following options:
      - a) Pay the Company for the installed cost of the excess length of service pipe; or
      - b) Provide "in-kind" services (e.g., ditching, labor, etc.) that are equal to or greater than the value of the installed cost of the excess length of service pipe; or
      - c) Use a combination of items a) and b) above.

If the customer chooses Option b) or c),above, the Company's total gas-service installation cost shall not exceed the original cost of installing the gas service from the gas main to the customer's property line, plus a further extension of 40 feet onto the customer's private property, as described in paragraph A.1. above. (continued)

Advice No. 08-02-G Issued March 31, 2008 Effective For Service On & After April 1, 2008

Issued by Avista Utilities

Environmental Intervenors/105 Cebulko/7

P.U.C. OR. No. 5

Original Sheet 16A

### AVISTA CORPORATION dba Avista Utilities

		RULE NO. 16 (con	inued)	
	SERVI	CE CONNECTIONS AND FACILITIES	ON CUSTOME	RS' PREMISES
В.	Servic	e Pipes for Firm Industrial and Interru	otible Service	
	servic servic	ost of a service pipe in excess of 40 fe e will be included in the determination e pipe and treated in accordance with classes of service.	of required inves	tment for mains and
C.	One S	Service Pipe for a Single Premises		
	1.	The Company will not install more the premises, unless it is for the convenie requests an additional service pipe a unreasonable burden would be place service pipe were denied. When an under these conditions at the applica- installed cost for the entire length of a	ence of the Comp nd, in the opinior d on the applicar additional service nt's request, the	oany or an applicant of the Company, an nt if the additional e pipe is installed applicant will pay the
	2.	When a service pipe extension is ma property which is subsequently subdi- ownership of portions thereof divester customer, the Company will have the discontinue service without obligation by said applicant or customer, will be applicable provisions of the Company	vided into separa d to other than th right, upon writto or liability. Gas re-established ir	ate premises, with ne applicant or the en notice, to service, as required
D.	Branc	h Service Pipe		
	premi Comp	dditional separately metered permaner ses, the Company will install a branch any, and will grant allowances on priva n Sections A. and B.	service pipe at th	ne option of the
E.	Reloc	ation of Service Pipes		
	1.	When in the judgement of the Compa including metering facilities, is neces maintenance of adequate service or	sary and is due e	
		(continued)	I	
Advice Issue		08-02-G March 31, 2008	Effective For Ser April 1, 2008	vice On & After
Issued by	Avis	ta Utilities		

Environn	nental Intervenors/105
1	Cebulko/8

P.U.C. (	DR. No. (	5 Original Sheet 16B	
		AVISTA CORPORATION dba Avista Utilities	
		RULE NO. 16 (continued)	
	SERV	ICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES	
		convenience of the Company, the Company will perform such work at its own expense.	
	2.	If relocation of service pipe is due solely to meet the convenience of the applicant or the customer, or is made necessary by acts of the customer which create hazards or which make the meter inaccessible, such relocation, including metering facilities, will be performed by the Company at the expense of the applicant or the customer.	
F.	Stand	by Use	
	No allowance will be made for equipment used for standby or emergency purposes only.		
G.	Other	Types of Service Pipes	
	Where an applicant or customer requests another type of service pipe such as stu service pipes, or service from transmission mains, the Company will consider eac such request and will grant an allowance equivalent to 40 feet of standard service pipe.		
Н.	Gene	ral	
	1.	The applicant or customer shall not attempt to connect his piping to the Company's main, service pipe or meter, nor shall he connect, disconnect, turn on, or move or adjust any of the Company's facilities.	
		Only duly authorized employees or other persons specifically authorized by the Company are permitted to perform work of this nature or to break a Company seal. The Company shall not be responsible or liable in damages or otherwise for injury to person or property caused by the unauthorized use of its facilities on the customers' premises by him or others.	S
	2.	For each gas service pipe installed or reconstructed the Company will include a suitable shutoff valve, located so as to be accessible at all times, outside of the structure served and between said structure and the gas main from which the service pipe is supplied.	
		(continued)	

Advice No. 08-02-G Issued March 31, 2008 Effective For Service On & After April 1, 2008

Issued by Avista Utilities

Environmental Intervenors/105 Cebulko/9

P.U.C. OR. No. 5

Original Sheet 16C

#### AVISTA CORPORATION dba Avista Utilities

#### RULE NO. 16 (continued)

#### SERVICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES

- 3. The Company at its expense will provide, install, own and maintain a suitable meter.
- I. Location of Meter, Protection and Service Facilities
  - 1. Meters normally will be located above ground adjacent to the building and as near as practicable to the distribution main from which the service pipe is extended. Meters will be placed at locations satisfactory to the Company. Such meters will be situated so as to be accessible at all times, for inspection, reading, testing, etc. The Company will install adequate protection around meters in Company approved locations when, in the Company's judgment, such measures are necessary for safety. The customer shall protect meters and other property supplied by the Company from damage or theft. The applicant or customer shall be responsible for installing his piping to the point of delivery. If the Customer requests a different meter location that requires the installation of adequate protection, the Company will install the protection at the Customer's expense. If, in the Company's judgment, meters or other property are not accessible or safe because of customer improvements at the Premise, or because of hazardous or potentially hazardous conditions or other actions of the customer, the Company may move or relocate the meter or other property at the customer's expense.
  - 2. Where separate meters are installed to measure gas supplied to customers such as tenants in commercial buildings or multi-family dwellings, the meters normally will be located at some central point at the ground level; except that where a central location is impractical meters may be placed at any other points satisfactory to the Company. It shall be the responsibility of the property owner to identify his piping so as to indicate the particular location to be served by each meter.
- J. Customer Facilities
  - 1. The customer shall, at his own risk and expense, furnish, install and keep in good and safe condition all regulators, gas piping, appliances, fixtures, and apparatus, of any kind or character, which may be required for receiving gas from the Company and for applying and utilizing such gas beyond the point of delivery, including all necessary protective appliances and suitable housing therefor. The customer shall not connect to his gas facilities any piping, equipment, or apparatus in such a manner as could cause a reversal of gas flow in the Company's facilities.

		(continued)		1	
Advice No. Issued	08-02-G March 31, 2008		Effective For S April 1, 2008	Service On & After	
				Service On & After	

Issued by Avista Utilities

Environmental Intervenors/105 Cebulko/10

P.U.C. OR. No	. 5
---------------	-----

Original Sheet 16D

### AVISTA CORPORATION dba Avista Utilities

		RULE NO. 16 (continued)
	SERV	VICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES
	2.	The customer shall be responsible for any loss or damage to the Company and its property, and shall indemnify the Company against any loss, liability, claim, injury, or damage to any person or property, occasioned or caused by the negligence, omission, or wrongful act of the customer or any of his agents, employees, licensees, or other persons in installing, maintaining, using, operating, repairing, or removing such gas piping, gas appliances, and other equipment or facilities of any kind which are situated beyond the point of delivery.
K.	Owner	ship
	1.	All meters, regulators, service pipes, and other facilities installed at the Company's expense, or with contributions or customer advances, located either wholly or partially upon the customer's premises will at all times be and remain the property of the Company.
	2.	When a meter and/or service facilities are installed by mutual consent on private property other than the applicant's the applicant will first secure, without cost to the Company, an easement for such installation satisfactory to the Company.
L.	Mainte	nance
	1.	The Company will exercise reasonable care to operate and maintain in a safe, efficient and proper condition all of its facilities used in connection with the regulation, measurement, and delivery of gas to any customer.
		All such facilities may be repaired, replaced, removed or abandoned by the Company at any time as operating conditions necessitate. Normally such facilities will not be subject to removal or abandonment except when:
		a. Service to the customer is terminated.
		b. The customer fails to comply with the Company's rules or other provisions of its tariff schedules.
		c. Hazardous or unsafe conditions exist.
		(continued)
Advic	e No.	08-02-G Effective For Service On & After
Issue	d	March 31, 2008 April 1, 2008
		a Utilities ). Norwood, Vice President, State and Federal Regulation

P.U.C. OR. No. 5

#### AVISTA CORPORATION dba Avista Utilities

		RULE NO.	16 (continued)	
	SERVICE CO	ONNECTIONS AND FA	CILITIES ON CUSTON	MERS' PREMISES
	regula custo tamp in and difficu other case	mer's premises, from b	I other facilities of the eing damaged, or desi- lebris, refuse or other tion so that access to omer shall not ground e nnections to the Comp any's facilities is disco	Company, located on the troyed, and shall not obstacles to accumulate the meter becomes electrical appliances or oany's gas facilities. In
	maint	ent or charge whatsoeve taining said meters, reg ustomer's premises.		
M.	Right of Acce	ess		
	customer's p with the furni	ny will at all times have the remises at all reasonable ishing or termination of ed to it by law or by thes ad to it by law or by the start address and the start address	le hours for any purpo gas service and the ex	se reasonably connected
N.	Exceptional	Cases		
	unjust to eith matter to the	er party, the Company,	the applicant, or the c I ruling or for the appre	oval of special conditions
	sued Au	9-04-G ugust 18, 2009		<b>or Service On &amp; After</b> otember 9, 2009
133060.0	y Avisia Uliil	100		

By Kelly O. Norwood, Vice President, State and Federal Regulation

(D)

JURISDICTION:	Oregon	DATE PREPARED:	4/13/2022
CASE NO.:	UG 461	WITNESS:	Joe Miller
<b>REQUESTER:</b>	CUB	<b>RESPONDER:</b>	Jeremiah Webster
TYPE:	Data Request	DEPT:	Financial Planning & Analysis
<b>REQUEST NO.:</b>	CUB - 005	TELEPHONE:	(509) 495-2764
		EMAIL:	Jeremiah.webster@avistacorp.com

#### **REQUEST:**

Please provide the average amount paid by Avista for line extensions for residential customers in the years 2017 - 2022.

#### **RESPONSE:**

Year	Total Residential Connects	Residential & Development Cost	Average
2017	1,433	4,942,989	3,449
2018	1,350	5,982,883	4,432
2019	1,251	6,559,017	5,243
2020	1,242	7,283,386	5,864
2021	1,113	6,282,097	5,644
2022	1,081	6,928,564	6,409

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 015

DATE PREPARED:05/15/2023WITNESS:Jeff WebbRESPONDER:Paul GoodDEPT:Natural GasTELEPHONE:(208) 769-1EMAIL:Paul.Good

Jeff Webb Paul Good Natural Gas Delivery (208) 769-1368 Paul.Good@avistacorp.com

#### **REQUEST:**

Please state the number of new main lines installed in the last ten years to connect new customers. Please provide this information in the form of total number of main lines per year and their length.

#### **RESPONSE:**

Avista does not track the number of new main lines installed in relation to new customers, however, we do track the total length of new main pipe installed, which may serve both new and existing customers. The table below provides the length of new main installed for the past ten years. The lengths include mains installed as part of our pipeline replacement programs, replacements required by road construction and mains replaced due to damage caused by others (excavation). The portion of mains installed to serve new customers is a portion of the total length of main installed.

Year Installed	Length of Main Feet	Length of Main Miles
2013	117,561.48	22.27
2014	127,709.36	24.19
2015	195,202.66	36.97
2016	219,804.69	41.63
2017	188,227.62	35.65
2018	171,845.00	32.55
2019	140,350.83	26.58
2020	146,091.10	27.67
2021	104,859.50	19.86
2022	122,103.39	23.13

JURISDICTION:	Oregon	DATE PREPARED	: 05/31/2023
CASE NO:	UG 461	WITNESS:	Joe Miller
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Marcus Garbarino
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	EG - 043	TELEPHONE:	(509) 495-2567
		EMAIL:	marcus.garbarino@avistacorp.com

#### **REQUEST:**

Please provide the Company's Oregon customer counts, by customer class, for each of the last five years.

#### **RESPONSE:**

See below for a table showing customer counts, by customer class, for each of the last five years (2018 - 2022):

Average Annual Customers by Schedule						
	2018	2019	2020	2021	2022	
OR410	90,119	91,337	92,304	92,972	93,820	
OR420	11,736	11,812	11,871	11,872	11,914	
OR424	84	88	95	97	98	
OR440	37	40	37	40	42	
OR444	2	2	2	2	2	
OR447	38	34	32	31	31	
OR456	3	2	2	2	2	

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 055

DATE PREPARED: 06/02/2023WITNESS:Jeff WebbRESPONDER:Terrence BrDEPT:Gas EngineTELEPHONE:(509) 495-8EMAIL:terrence.bro

Jeff Webb Terrence Browne Gas Engineering (509) 495-8551 terrence.browne@avistacorp.com

#### **REQUEST:**

Please describe and quantify total investments in non-pipeline investments that the Company has pursued in Oregon specifically targeted to meet capacity or reliability needs over the last five years. Please identify total investment by measure.

#### **RESPONSE:**

Avista has not had any non-pipeline investments in Oregon. Avista is currently working with the Energy Trust of Oregon to determine if a targeted demand side management effort can reduce or eliminate the need for some proposed reinforcements. Prior to these efforts, Avista has not had any recent opportunities to explore non-pipeline investments in Oregon, as the last several pipeline capacity reinforcements were not large enough in scope to justify a cost-effective non-pipeline investment.

JURISDICTION:	Oregon	DATE PREPARED:	06/02/2023
CASE NO:	UG 461	WITNESS:	Tia Benjamin
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Tia Benjamin
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	EG - 071	TELEPHONE:	(509) 495-2225
		EMAIL:	tia.benjamin@avistacorp.com

#### **REQUEST:**

Please reference the testimony of witness Benjamin, page 36, beginning on line 7.

1. Please provide an Excel workbook that identifies each investment, the estimated cost of each investment, and, if applicable, the actual cost of the investment.

2. Please characterize the ten most common investments that are categorized in the Failed Plant and Operations investments.

3. Please explain the causes that required each investment in (b).

4. Please quantify the total costs for each investment type in (b).

#### **RESPONSE:**

- Please see EG\_DR\_071 Attachment A where the Company has provided the pro formed Oregon direct capital additions for the Gas Non-Revenue Program business case for the period October 2022 through December 2023, as extracted from Ms. Benjamin's workpapers: 2.07-2.10 Capital Additions Model alongside the actual Oregon direct capital additions for the period October 2022 through February 2023; and the revised pro forma for the period March 2023 through December 2023, as extracted from Staff\_DR\_252 Supplemental Attachment A.
- 2. Referring to the Gas Non-Revenue Program business case, provided in Ms. Benjamin's Exhibit 602, page 48:

This work is typically unplanned and is initiated by customers or Avista maintenance crews and is managed at the Local District level. Gas Engineering establishes the overall budget based largely on historical spend patterns and reports monthly updates to the Capital Planning Group based on feedback from the Local Districts. Gas Engineering is responsible for projects under this ER that require substantial design efforts such as farm tap retirements, highway or river crossings, and steel pipelines.

The work in this annual program is mostly reactionary, unplanned work and is difficult to predict aside from using historical trends. The following situations are typical triggers for work in this program: shallow facilities found by excavation (the excavation may or may not be related to gas construction), relocation of facilities as requested by others (except for road and highway relocations), leak repairs on mains or services, and farm tap elimination. Customer related benefits include reduced operations and maintenance (O&M) costs and improved safety and reliability from having facilities at the proper depth and from reduced leak rates of new plastic pipe versus older steel. The business needs and solutions identified impact all gas customers in Avista's service territory.

- 3. Please refer to section 1. Business Problem of the Gas Non-Revenue Program business case provided in Ms. Benjamin's Exhibit 602 at page 51, where a detailed discussion of the reasons for this work are presented, including shallow facilities, customer request, and leaks, among others.
- 4. Please see EG\_DR\_071 Attachment B for a schedule of actual capital additions by subset<sup>1</sup> which the company uses to track the actual additions related to the work under this business case. The company does not keep records in the format requested in part (2).

<sup>1</sup> The Company only budgets as low as the budget item (BI) level, the Company does not have pro forma data to the level that actual capital additions are provided in EG\_DR\_071 Attachment B.

JURISDICTION:	Oregon	DATE PREPARED	: 06/01/2023
CASE NO:	UG 461	WITNESS:	Kevin Holland
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Shawn Bonfield
TYPE:	Data Request	DEPT: Natural	Regulatory Affairs
<b>REQUEST NO.:</b>	EG – 030 Supplemental	TELEPHONE:	(509) 495-2782
		EMAIL:	shawn.bonfield@avistacorp.com

#### **REQUEST:**

How will Avista seek recovery for the costs to acquire CCIs?

#### **RESPONSE:**

Avista objects to this question because it seeks information that does not relate to issues in this proceeding and is beyond the stated scope of Petitioner's intervention.<sup>1</sup> Avista is not seeking recovery of any CCI costs in this proceeding. This matter may come before the Commission in a later proceeding but is not before the Commission at this time in this docket. Petitioner's request would unduly expand the scope of this proceeding.

#### **SUPPLEMNTAL RESPONSE:**

Without waiving the foregoing objection, the answer is the Company intends to seek recovery of the costs to acquire CCIs from all customers, beginning November 1, 2023, through a new tariff rider that is expected to be filed in Q3 2023.

<sup>&</sup>lt;sup>1</sup> "Petitioners will assess the prudency of investments in gas system maintenance and expansion, policies related to new gas customer additions—especially in light of climate change, and the need to mitigate for stranded asset risks. Petitioners anticipate evaluating policies and expenditures related to energy burden, energy efficiency, weatherization, bill discount rates, and the affordability of gas utility rates for residential customers. Lastly, Petitioners will review investments into gas related advertising, promotion, and outreach efforts by Avista Utilities, to ensure all charges billed to ratepayers are appropriate. Petitioners may also address additional issues that arise in the course of this proceeding."

#### **BEFORE THE PUBLIC UTILITY COMMISSION**

#### **OF OREGON**

#### UG 461

In the Matter of	)
AVISTA CORPORATION, dba AVISTA UTILITIES,	) ) )
Request for a General Rate Revision.	)

#### **REDACTED OPENING TESTIMONY**

#### **OF CARRA SAHLER**

#### ON BEHALF OF SIERRA CLUB AND CLIMATE SOLUTIONS

July 7, 2023

# TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY
II.	CLIMATE CONTEXT
III.	TRENDS TOWARD BUILDING ELECTRIFICATION12
IV.	THE CLIMATE PROTECTION PROGRAM, THE NATURAL GAS FACT FINDING PROCESS, AND GAS UTILITY INTEGRATED RESOURCE PLANS
V.	THE CPP'S IMPACTS ON AVISTA AND THE ASSOCIATED RISKS TO CUSTOMERS
VI.	THE COMMISSION SHOULD DISALLOW RECOVERY FOR CUSTOMER         GROWTH COSTS INCLUDING LINE AND MAIN EXTENSIONS
VII.	FINAL THOUGHTS MOVING FORWARD45
VIII.	CONCLUSION46

3

4

5

17

18

19

20

21

22

23

## I. INTRODUCTION AND SUMMARY

### **Q.** Please state your name and position.

 A. Carra Sahler, Interim Director and Staff Attorney at the Green Energy Institute (GEI) at Lewis & Clark Law School. My office address is 10101 S. Terwilliger Blvd., in Portland, Oregon.

## 6 **Q.** Please describe your education and employment background.

- 7 A. Please see my witness statement and summary of qualifications attached as Exhibits
  8 Environmental Intervenors/201 and 202.
- 9 Q. On whose behalf are you submitting testimony?
- 10 A. I am submitting testimony on behalf of Climate Solutions and Sierra Club.
- 11Q.Have you previously testified or provided comments before the Oregon Public12Utility Commission or other utility commissions?
- A. Yes. I have participated in and provided testimony on a number of PUC proceedings,
  including weighing in on PUC's proposed plans to implement Executive Order 20-04;
  "Natural Gas Fact Finding" proceeding (UM 2178); Community Solar Program (UM
  16 1930); NW Natural's Integrated Resource Plan (LC 79); HB 2021 implementation
  - dockets (UM 2225, UM 2273, AR 651); HB 2165 implementation (UM 2165 and AR
    - 655); and NW Natural's Integrated Resource Plan (LC 79).

# Q. To implement the state's climate policies, what proceedings have you participated in?

GEI's extensive involvement in the development of the CPP informed my participation in the Commission's investigation into ratepayer and system impacts associated with gas utility CPP compliance in UM 2178. Additionally, I am currently serving on DEQ's 2023

OPENING TESTIMONY OF CARRA SAHLER UG 461

Climate Rulemaking Advisory Committee providing technical and legal feedback related to proposed revisions to DEQ's Greenhouse Gas Reporting Rules, Third-Party Verification Rules, and Climate Protection Program Rules.

4

1

2

3

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

## Q. What materials did you review in preparing this testimony?

A. I reviewed Avista's 2023 Integrated Resource Plan, the testimony supporting Avista's General Rate Revision, the UM 2178 Natural Gas Fact Finding Report and materials leading up to the final report, briefing submitted to the PUC in the docket addressing NW Natural's 2022 IRP, as well as the publications contained in the citations below.

9 ||

Q.

## What is the purpose of your testimony?

A. I will address six main topics in my testimony: (1) the climate context; (2) trend toward electrification of buildings; (3) the requirements of the Climate Protection Program (CPP), guidance from the UM 2178 Natural Gas Fact Finding, and learnings from gas utility Integrated Resource Plans; (4) the CPP's impacts on Avista's planning and the associated risks to ratepayers; (5) eliminating subsidies for line extensions and main extensions that promote continued gas customer growth; and (6) final thoughts moving forward.

Each of these topics relates to a broader conversation regarding the future of the gas system during a climate emergency and, more specifically, to Avista's approach to investing and ratemaking that ignores both the conversation and the climate crisis. Avista seeks to "maintain, upgrade, and expand its natural gas distribution facilities," requiring it to resolve purported capacity constraints, replace assets that are at the end of their lives,

OPENING TESTIMONY OF CARRA SAHLER UG 461

connect new customers, and replace technology.<sup>1</sup> But many or all of these investments are not prudent when expansion of the gas system runs counter to Oregon's goals to reduce greenhouse gas (GHG) emissions, when adding customers risks non-compliance with the CPP (and the penalties that will engender), and when new mains and serve lines will burden customers with stranded assets in the future. Instead, Avista should eliminate costs associated with continued growth and downsize pipeline infrastructure when more cost-effective alternatives are available. Certainly, any investments supporting growth of the gas system following adoption of the CPP are imprudent.

It is difficult to comprehensively discuss policy issues in rate cases, but it is similarly difficult to address utility spending proposals in broad policy dockets. The siloed nature of IRP and rate proceedings is particularly problematic when policies shift between the filing of an IRP and the filing of a rate case. Accordingly, I provide recommendations for the Oregon Public Utility Commission ("Commission") to consider in this rate case because the future of the gas system, and how well the Commission protects ratepayers who continue to use the gas system, will be shaped in part by the decisions it makes here.

**Q.** Please summarize your recommendations.

A. I recommend that service and main line extension allowances be set at \$0. I recommend that the Commission adopt regulatory tools, described more fully in Bradley Cebulko's testimony, to avoid investing in pipeline infrastructure when downsizing is more costeffective as well as aligned with state climate policy requirements. I recommend that

<sup>1</sup> Avista/100, Vermillion/18.

OPENING TESTIMONY OF CARRA SAHLER UG 461

investments made after adoption of the CPP related to expansion of the gas system be deemed imprudent.

# II. <u>CLIMATE CONTEXT</u>

# Q. How is climate change affecting Oregonians?

A. Commissioners are fully aware of the intensifying climate crisis and its impacts on

Oregonians. Once unprecedented heat events are now regular features of Oregon

seasons,<sup>2</sup> often causing illness and death.<sup>3</sup> The May 2023 heatwave reflected

temperatures 6.2 degrees above normal, and broke the record for the most consecutive

May days of 90 degrees or over.<sup>4</sup> According to Oregon's Climate Change Research

Institute at Oregon State University, Oregon's average annual temperature has already

increased by 2.2 degrees F. per century from 1895-2021.<sup>5</sup>

<sup>2</sup> Austin De Dios, Oregon's Extreme Weather in 2022 Included April Snow and a Record Hot October, The Oregonian (Dec. 28, 2022),

<u>https://www.oregonlive.com/weather/2022/12/oregons-extreme-weather-in-2022-included-april-snow-and-a-record-hot-october.html</u> (Portland tied record for most days in a year with temperatures equal to or exceeding 100 degrees F; at least 15 people died).

<sup>3</sup> Amelia Templeton & Monica Samayoa, *Oregon Medical Examiner Releases Names of June Heat Wave Victims*, OPB (Aug. 6, 2021), <u>https://www.opb.org/article/2021/08/06/oregon-june-heat-wave-deaths-names-revealed-medical-examiner/</u> (resulting in more than 500 deaths across the Northwest and Canada); *Final Report: Health Impacts from Excessive Heat Events in Multnomah County, Oregon, 2021*, Multnomah County 23 (2022), <u>https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/20220624\_final-heat-report-2021\_SmallFile-2.pdf</u>.

<sup>&</sup>lt;sup>4</sup> Lizzy Acker, *Portland's Ongoing May Heatwave is Breaking All Kinds of Records*, Oregonian (May 18, 2023), <u>https://www.oregonlive.com/weather/2023/05/portlands-ongoing-may-heatwave-is-breaking-all-kinds-of-records.html</u>.

<sup>&</sup>lt;sup>5</sup> Erica Fleishman, ed., *Sixth Oregon Climate Assessment*, Oregon Climate Change Research Institute, Oregon State Univ., Corvallis, Oregon 11 (2023), https://blogs.oregonstate.edu/occri/oregon-climate-assessments.

Climate-caused catastrophic wildfires are now alarming annual crises. Wildfires in 2020, 2021, and 2022 each burned hundreds of thousands of acres in Oregon, destroying nearly 2.5 million acres of land. Oregonians collectively hold their breath during the summer months; even reaching what should be the cooler fall season brings no reprieve. Last year, the Governor called a wildfire state of emergency for August and September, and fires were still burning in October.<sup>6</sup> Q. What needs to happen in order to avert a climate crisis? A. The Intergovernmental Panel on Climate Change (IPCC) provides direction to policymakers about what needs to happen to keep our planet livable. The planet has already warmed by 1.1 degree C, and GHG emissions are still rising.<sup>7</sup> "Global greenhouse gas emissions have continued to increase, with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries, and among individuals[.]"<sup>8</sup> "Compound heatwaves and droughts are

<sup>6</sup> Emily York, et al., *Climate and Health in Oregon: 2020 Report* 3, Oregon Health Authority (Dec. 2020),

https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documen ts/2020/Climate%20and%20Health%20in%20Oregon%202020%20-%20Full%20Report.pdf (2020 wildfires burned over 1 million acres and devastated over 4,000 residences); Julie Sabatier, *What Is the 'New Normal' When It Comes to Wildfire Season?*, OPB (Sept. 24, 2021), https://www.opb.org/article/2021/09/24/what-is-the-new-normal-when-it-comes-to-wildfireseason/ (in 2021 a total of 828,777 acres were burned); Austin De Dios, *Oregon's Extreme Weather in 2022 Included April Snow and a Record Hot October*, The Oregonian (Dec. 28, 2022), https://www.oregonlive.com/weather/2022/12/oregons-extreme-weather-in-2022included-april-snow-and-a-record-hot-october.html (536,693 acres burned in 2022).

<sup>7</sup> IPCC, 2023: *Climate Change 2023 Synthesis Report*, "Summary for Policy Makers," at 4, <u>https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\_AR6\_SYR\_SPM.pdf</u>.

<sup>8</sup> *Id*. at 4.

OPENING TESTIMONY OF CARRA SAHLER UG 461

projected to become more frequent[.]"<sup>9</sup> "As warming levels increase, so do the risks of species extinction or irreversible loss of biodiversity in ecosystems including forests[.]"<sup>10</sup>

A child born today could experience a completely different world, with global climate change reaching up to 4 degrees if humans don't take aggressive action to curb climate change now.<sup>11</sup> Our likelihood of limiting warming to 1.5 degrees C, consistent with the Paris Climate Accord, is "very low" and requires immediate and aggressive efforts to eliminate GHG emissions.<sup>12</sup>

If we continue to rely on existing fossil fuel infrastructure, we will exceed the 1.5 degree C threshold.<sup>13</sup> Ending the growth of fossil fuel infrastructure is imperative to avoid climate catastrophe. To limit warming to 1.5 degree C, we must achieve net zero carbon emissions through deep and rapid reductions in carbon emissions.<sup>14</sup> This means transitioning away from fossil fuels to zero or very low-carbon energy alternatives.<sup>15</sup> Further, the IPCC report concludes that global *methane* emissions must be reduced by at least 34% by 2030 to have any hope of limiting warming to 1.5 degrees C.<sup>16</sup> Methane is the principal component of natural gas. Importantly, investment decisions, like those

<sup>14</sup> *Id*. at 20.

<sup>15</sup> *Id.* at 21.

<sup>16</sup> *Id.* at 21.

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>9</sup> *Id.* at 13.

<sup>&</sup>lt;sup>10</sup> *Id.* at 18.

<sup>&</sup>lt;sup>11</sup> *Id*. at 7.

<sup>&</sup>lt;sup>12</sup> *Id.* at 10.

<sup>&</sup>lt;sup>13</sup> "Projected CO2 emissions from existing fossil fuel infrastructure without additional abatement would exceed the remaining carbon budget for  $1.5^{\circ}$ C[.]" *Id.* at 19.

faced by the Commission in this rate case, are significant for mitigation because they lock in high- or low- emissions trajectories over long periods.

## Q. What are the State of Oregon's climate goals?

A. EO 20-04 established targets for the State of Oregon to reduce greenhouse gas emissions at least 45 percent below 1990 emissions levels by 2035 and at least 80 percent below 1990 emissions levels by 2050. The EO directs state agencies to "exercise any and all authority and discretion vested in them by law to help facilitate Oregon's achievement of the GHG emissions reduction goals" set forth in the EO, including by prioritizing and expediting any processes and or agency dockets that could accelerate GHG emission reductions and integrating climate change and emissions reduction goals into agency planning and policymaking decisions. Section 5(A) of the EO directs the PUC to consider the following Statement of Public Interest: "It is in the interest of utility customers and the public generally for the utility sector to take actions that result in rapid reductions of GHG emissions ...."<sup>177</sup> Section 5(A)(1) directs the PUC to "Determine whether utility portfolios and customer programs reduce risks and costs to utility customers by making rapid progress towards reducing GHG emissions consistent with Oregon's reduction goals."

The EO 20-04 directives are now further supported by Oregon law. Specifically, recently enacted legislation now requires the Public Utility Commission, among other state agencies, to consider GHG emissions reduction goals and "align[] the creation or operation of new or existing designated state agency programs with greenhouse gas

<sup>&</sup>lt;sup>17</sup> Office of the Governor, State of Oregon, Exec. Order 20-04, https://www.oregon.gov/gov/Documents/executive\_orders/eo\_20-04.pdf.

emissions reduction goals" in any of its programs that incentivize or regulate energy efficiency.<sup>18</sup> Additionally, the PUC must now report to the Oregon Climate Action Commission (formerly the Oregon Global Warming Commission) about its efforts to "make progress toward the greenhouse gas emission reduction goals" in state law.<sup>19</sup> In compliance with EO 20-04, Oregon's Environmental Quality Commission

(EQC) adopted the Climate Protection Program (CPP) to cap and reduce greenhouse gas emissions. The regulatory scheme, described next, which took effect in January of 2021, is fully operative at this time.

## **Q.** What is the Climate Protection Program (CPP)?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

A.

The CPP establishes mandatory requirements for Oregon's gas utilities and other fossil fuel suppliers to reduce regulated greenhouse gas emissions 50% below averaged 2017-2019 emissions by 2035, and 90% below averaged 2017-2019 emissions by 2050.

The CPP also includes an alternative compliance option for regulated fossil fuel suppliers that will generate investments to help reduce emissions from transportation and buildings, and support environmental justice communities in the transition. Through this Community Climate Investment (CCI) program, a fuel supplier or fossil gas utility is allowed to invest in projects to reduce emissions in Oregon communities–for example,

<sup>&</sup>lt;sup>18</sup> Designated State Agency Programs for Energy Efficiency in Buildings, Enrolled HB 3409 (HB 3409-C), Section 2(2)(a) and (b), https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/HB3409/Enrolled.

<sup>&</sup>lt;sup>19</sup> Oregon Climate Action Commission, HB 3409-C, Section 42(4) (amending ORS 468A.225), https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/HB3409/Enrolled.

replacing fossil gas appliances with electric heat pumps in an apartment complex–instead of directly reducing some of their own climate pollution.<sup>20</sup>

## **Q.** How do you expect the CPP to impact the use of fossil gas?

A. The CPP's GHG emissions cap will require significant change, not just from the gas utilities, but also from the Commission. As Synapse explained in its report to Commission staff in the context of NW Natural's most recent IRP, "the introduction of the Climate Protection Program in Oregon directly disrupts historical approaches to gas IRP because it dramatically limits emissions that are a direct by-product of consuming conventional natural gas. . . . Going forward, both the numbers of new customers and average use per customer are subject to potentially steep declines and ahistorical trends."<sup>21</sup>

In addition to concerns about how the gas utilities anticipate complying with the CPP, the Commission has appropriately expressed a concern about how an unmanaged approach to electrification may impose inequitable burdens and costs on customers.<sup>22</sup> Accordingly, to ensure low-income ratepayers are protected, as I set out in more detail below, the Commission must demand that the utility eliminate the costs associated with

<sup>20</sup> OAR 240-271-0900.

<sup>22</sup> Or. Pub. Util. Comm'n, Docket No. LC 79, NW Natural 2022 IRP, Commissioner Work Session, at 9:45 to 10:20 (June 6, 2023),

https://oregonpuc.granicus.com/player/clip/1180?view\_id=2&redirect=true&h=767d6e4f4c7a74 dcb064b7cc49a19ce9 I reference the recording of the work session in lieu of the published order, which is yet to be filed.

<sup>&</sup>lt;sup>21</sup> Or. Pub. Util. Comm'n, Docket No. LC 79, Staff Final Comments, App'x A, Synapse Review of Northwest Natural Gas 2022 Integrated Resource Plan - Final Report, Executive Summary at i (Mar. 20, 2023), <u>https://edocs.puc.state.or.us/efdocs/HAC/lc79hac142022.pdf</u>.

continued growth and that it downsize pipeline infrastructure where appropriate to avoid unnecessary investments.

### III.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# Q. Do you expect to see declining demand for fossil gas regionally?

TRENDS TOWARD BUILDING ELECTRIFICATION

A. The likelihood that the gas system will provide the fuel for cooking and heating in the future is simply not plausible. The combination of alternative fuel costs, federal and state electric appliance incentives, state efficiency measures, and climate action at all levels of government points to a future where millions of miles of mains and service lines, and associated infrastructure, will no longer be used and useful. Avista is responsible for 3,700 miles of that pipeline in Oregon.<sup>23</sup> In the meantime, a dwindling number of customers will be paying for that infrastructure. I address each of these factors in turn.
Q. Why do you think that alternative fuels will not substitute for fossil gas in the gas system?
A. Building infrastructure to capture and clean biogas, or even purchasing biogas from others who capture and clean it, is likely to be prohibitively expensive for the foreseeable future. In the modeling exercise conducted during the 2021 Natural Gas Fact Finding

18

17

workshops, renewable natural gas (RNG) costs ranged from at least double to more than

double fossil gas in the early years, with prices decreasing at different rates after 2025.<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> Avista 2023 IRP at 8-1. Avista filed their 2023 Natural Gas Integrated Resource Plan with the Commission as a supplemental exhibit. This document is available at: Avista/402, Holland/1-195. For ease of reference, this testimony will refer to this exhibit in footnotes as "Avista 2023

IRP." <sup>24</sup> Or. Pub. Util. Comm'n, Natural Gas Fact Finding, Docket No. UM 2178, NW Natural presentation, slide 34, available at

In their review of NW Natural's 2022 IRP, PUC staff noted that purchasing CCIs under the CPP as a compliance mechanism, instead of purchasing biogas up to the amount the company believed was permissible pursuant to Oregon's voluntary RNG legislation (SB 98), would save ratepayers \$150,000,000.<sup>25</sup> The Commission declined to acknowledge NW Natural's SB 98 RNG investments, in lieu of CCIs, and declined to acknowledge the utility's long-term plan to comply with the CPP that relied on RNG, hydrogen, and synthetic methane.<sup>26</sup>

Avista's IRP indicates that, depending on the source of the biogas–landfill, food waste, dairy, or wastewater–the price per dekatherm ranges from approximate \$10 to over \$50 as of 2025, and is expected to rise over time.<sup>27</sup> Biogas significantly exceeds the cost of fossil gas by between \$9 and \$72 per dekatherm by 2045.<sup>28</sup> According to Avista, hydrogen, which is not even selected by Avista's model, will start at more than \$35.00 a dekatherm and decline to \$12.00 a dekatherm with the Inflation Reduction Act

https://oregonpuc.granicus.com/player/clip/1180?view\_id=2&redirect=true&h=767d6e4f4c7a74 dcb064b7cc49a19ce9.

https://edocs.puc.state.or.us/efdocs/HAC/um2178hac10454.pdf; see also Draft Staff Report at 13, available at https://edocs.puc.state.or.us/efdocs/HAH/um2178hah155046.pdf.

<sup>&</sup>lt;sup>25</sup> Or. Pub. Util. Comm'n Docket No. LC 79, NW Natural 2022 IRP, Staff Final Comments 9 (Mar. 30, 2023).

<sup>&</sup>lt;sup>26</sup> Or. Pub. Util. Comm'n Docket No. LC 79, NW Natural 2022 IRP, Commissioner Work Session (June 6, 2023),

<sup>&</sup>lt;sup>27</sup> Avista 2023 IRP, Figure 4.12 at 4-23 (reflecting RNG prices), Figure 4.6 at 4-8 (average price of fossil gas); see also Table 4.4 at 4-26.

<sup>&</sup>lt;sup>28</sup> Avista 2023 IRP, Figure 4.12 at 4-23 (reflecting RNG prices), Figure 4.6 at 4-8 (average price of fossil gas); see also Table 4.4 at 4-26.

incentive.<sup>29</sup> Synthetic methane is estimated by Avista to cost around \$55 per dekatherm in 2023, decreasing to about \$15 per dekatherm by 2045.<sup>30</sup>

Additionally, Avista's market research reflects that, at least for its territory, the price of energy is the highest priority of its customers. Thirty percent of the customers Avista polled would need bill assistance, or would consider moving to another state, if bills increase due to carbon-free or carbon-neutral energy.<sup>31</sup> Accordingly, combined with the factor I discuss next, Avista's customers may be especially sensitive to seeking alternative appliance options that cost less.

**Q.** Will electric appliance incentives impact demand for fossil gas?

A. Yes. The Federal government, through the Inflation Reduction Act, now offers expanded residential tax credits for heat pumps, and provides rebates on heat pumps, electric ranges, and electric clothes dryers. <sup>32</sup> Oregon, too, passed funding in 2022 allocating \$15 million to the Oregon Department of Energy to support heat pump installations in Oregon rental homes.<sup>33</sup>

More recently, the Oregon legislature passed the Climate Resilience package (HB 3409), which among other things, sets a state goal of installing 500,000 heat pumps by 2030, supports clean energy retrofits for both residential and commercial buildings, and

<sup>33</sup> <u>https://www.oregon.gov/energy/Incentives/Pages/ORHHPP.aspx.</u>

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>29</sup> Avista 2023 IRP, Figure 4.14 at 4-25.

<sup>&</sup>lt;sup>30</sup> Avista 2023 IRP, Figure 4.15 at 4-26; Table 4.4.

<sup>&</sup>lt;sup>31</sup> Avista 2023 IRP, 5-15 to 5-16.

<sup>&</sup>lt;sup>32</sup> H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022 (Aug. 16, 2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text.

creates a "one-stop shop" within the Oregon Department of Energy for individuals and companies to access federal clean energy rebates.<sup>34</sup>

## Q. How will efficiency measures impact demand?

A. Washington's State Building Code Council updated the state's commercial energy code, which will require new commercial buildings and multifamily residential buildings to install electric heat pumps.<sup>35</sup> Additionally, SBCC updates will limit natural gas use in residential buildings when those code changes go into effect. The building code changes in Washington will impact trends in Oregon; they will ramp up the supply of electric heat pumps, help to educate the HVAC workforce, and demonstrate the benefits of electrification to industry, commercial businesses, and local governments in Oregon.

Oregon's recently enacted legislation that I mentioned above follows in Washington's footsteps. In addition to supporting and incentivizing electric appliances, the Climate Resilience package (HB 3409) supports a variety of energy efficiency improvements for buildings. Notable among them is a requirement for existing large commercial buildings to be made more efficient over time via a "Building Performance Standard." Although this policy does not require exclusive use of electric appliances, it will likely encourage large commercial building owners to transition to high-efficiency electric appliances including heat pumps to meet their energy efficiency requirements. The package also included language requiring the Oregon Building Codes Division, as

<sup>34</sup> Enrolled HB 3409 (HB 3409-C), available at

https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/HB3409/Enrolled.

<sup>&</sup>lt;sup>35</sup> Washington State Energy Code, Commercial, 2021 Edition, WAC 51-11C (effective Oct. 29, 2023).

part of the Division of Consumer and Business Services, to aim to achieve a 60 percent reduction in energy consumption in new residential and commercial buildings from a 2006 baseline by 2030. This policy also requires the agency to consider GHG emissions in its decision-making, within its existing authority. Again, while these changes do not necessarily require new construction to be all-electric, they certainly drive highefficiency electric solutions.<sup>36</sup>

Avista's own analysis demonstrates the efficiency and cost benefits of electrification, as discussed below. Further, in a legal challenge to Washington state's building codes, Avista executives predict that similar (but not identical) building electrification requirements in Washington will cause a substantial decline in the number of gas customers it serves.<sup>37</sup> I am unaware of whether any similar analysis has been performed for Avista's Oregon service areas but I expect that the impact will be analogous.

At the federal level, the Energy Department has proposed to protect customers from gas stove pollution by the end of 2024 by requiring higher efficiency levels from gas stoves. These proposed rules would mean that half of the currently offered gas stove models could no longer be sold in the United States.<sup>38</sup>

**Q.** What climate and health concerns might drive reductions in fossil gas use?

 <sup>&</sup>lt;sup>36</sup> Enrolled HB 3409 (HB 3409-C), available at https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/HB3409/Enrolled.
 <sup>37</sup> Ex. Environmental Intervenors/203, Declaration of Grant Forsyth, *Rivera v. Wash. State Building Code Council*, E.D. Wash. No. 1:23-cv-03070-SAB.

<sup>&</sup>lt;sup>38</sup> Brian Dabbs, E&E News, DOE rule may block 50% of current gas stove models (Feb. 24, 2023), <u>https://www.eenews.net/articles/doe-rule-may-block-50-of-new-gas-stoves/</u>.

A.

Cities in Oregon are exploring options to meet goals set out in their climate action plans that will have additional impacts on gas consumption. In Avista's service territory, the City of Ashland is exploring its options to ban gas in new residential construction.<sup>39</sup> The City of Talent supported the City of Berkeley's petition for rehearing en banc in the *California Restaurant Association v. City of Berkeley* case pending at the Ninth Circuit, seeking reassurance of its authority to limit or prohibit gas use in buildings.

Reductions in demand are also being driven by changing consumer awareness and preferences. Beneficial electrification brings improved health outcomes; eliminating gas in homes also removes nitrogen oxides (NOx), linked to childhood asthma, and benzene, a carcinogen with no safe exposure level.<sup>40</sup> These facts have been the subject of extensive public discussion and will drive decisions about replacement appliances. Alternative fuels like biogas are unlikely to be chosen as substitutes for fossil gas. Biogas is primarily methane, a greenhouse gas approximately 86 times more potent than carbon dioxide over a 20-year period, and its usage produces the same emissions (and therefore causes the same negative health impacts). Most sources of biogas have net positive lifecycle emissions, despite Oregon's statutory treatment of the fuel as a zero emissions alternative. Additionally, emissions from leaks are likely undercounted.<sup>41</sup> And

<sup>&</sup>lt;sup>39</sup><u>https://www.oregonlive.com/environment/2023/06/ashland-moves-toward-natural-gas-ban-in-new-homes.html</u>.

<sup>&</sup>lt;sup>40</sup> A Review of the Evidence Public Health and Gas Stoves, Multnomah County, 2022. <u>https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/gas-stoves-health-risk-report-2022\_0.pdf</u>.

<sup>&</sup>lt;sup>41</sup> A comparison of biogas plants in Denmark found that plants could have methane losses between 0.4 and 15.0% of the production total. Methane loss is the largest source of greenhouse gas emissions for many biogas plants. C. Scheutz, A. Fredenslund, "Total methane emissions

incentivizing methane production works against the ultimate goal of reducing GHG emissions by encouraging unsustainable farming practices. In short, current emissions accounting overstates the true impact of biogas and the growing understanding of this fact (and associated regulation) may dissuade customers from accepting biogas as a replacement option for fossil gas.

#### IV. THE CLIMATE PROTECTION PROGRAM, THE NATURAL GAS FACT FINDING PROCESS, AND GAS UTILITY INTEGRATED RESOURCE PLANS

Q. What tools did Commission Staff recommend in the UM 2178 Natural Gas Fact Finding to guide assessment of utilities' planned investments in the context of the CPP?

A. In its Final UM 2178 report, PUC Staff recommended a variety of actions to help mitigate potential risks to gas utility ratepayers posed by CPP implementation. As a 12 13 baseline, Staff stressed that meeting CPP emission reduction requirements is the policy of 14 the state and solutions to ensure compliance must be rapidly scaled up. Staff found that there are costs and risks associated with a variety of CPP compliance strategies, but that, 15 16 "if thoughtfully done, the transition to a decarbonized gas sector can create benefits and long-term cost savings for customers and the Oregon economy."42 Staff largely focused 17 18 on regulatory tools to mitigate potential customer risks, including to:

<sup>42</sup> Staff's Final Report – Natural Gas Fact Finding investigation, Or. Pub. Util. Comm'n Docket No. UM 2178, at p. 39, filed Jan. 31, 2023, https://edocs.puc.state.or.us/efdocs/HAU/um2178hau111621.pdf

1

2

3

4

5

6

7

8

9

10

11

rates and losses from 23 biogas plants," Waste Management, Vol. 97, Sep. 2019, pp. 38-46, https://www.sciencedirect.com/science/article/abs/pii/S0956053X19304842.

1	-	Include estimated ratepayer bill impact analysis in IRPs to ensu	re transparency of					
2		trends and implications of compliance pathways as represented	in portfolios. <sup>43</sup>					
3	-	Include assessments of CPP compliance risks, like load growth	from new customers,					
4		in prudency review of investments in the distribution system, in	order to limit					
5		uncertainty around accumulation of long-term capital assets. <sup>44</sup>						
6	-	Explore accelerated depreciation of unamortized investments in the gas utilities' next						
7		depreciation studies and provide a sensitivity analysis to better	understand rate					
8		impacts. <sup>45</sup>						
9	-	Explore transport customer rate spread and rate design issues re	lated to CPP					
10		compliance in general rate cases. <sup>46</sup>						
11	-	Submit through the Purchased Gas Adjustment process, or other	r annual docket, an					
12		annual report on full CPP compliance costs.47						
13	-	Explore linking the amortization of CPP compliance costs from	deferrals to actual					
14		CPP performance. Should gas companies selected CPP complia	nce activities fall					
15		short of meeting the three-year CPP compliance demonstration	window, PUC Staff					
16		should investigate the extent to which deferred CPP costs shoul	d be amortized. <sup>48</sup>					
	$\frac{1}{4^3}$ <i>Id.</i> at 20	).						
	$^{44}$ <i>Id</i> . at 21							
	45 <i>Id</i> .							
	46 Id.							
	47 <i>Id.</i> at 33	3.						
	48 Id.							
	OPENING UG 461	G TESTIMONY OF CARRA SAHLER	Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340					
	1							

3

4

5

6

7

8

9

10

11

12

13

14

15

16

**Q**.

# What guidance has the Commission provided to gas utilities about how to protect customers in Integrated Resource Planning processes?

A. In response to the CPP, Commission staff recently unveiled new criteria by which to assess gas utility IRPs. As part of the directive, "investments and activities found in preferred portfolios and IRP Action Plans must demonstrate both how they achieve longrun GHG emission reductions *and* avoid near-term penalties during each three-year compliance period."<sup>49</sup> The Commission staff put forward a high-level framework for evaluating distribution system upgrades, which the Commission adopted.<sup>50</sup>

Similarly, in evaluating NW Natural's 2022 Integrated Resource Plan, Commissioners expressed a desire to see NW Natural "optimize" its current investments to protect customers, rather than engage in a strategy of heavily investing in new fossil fuel infrastructure, and put all options on the table including electrification.<sup>51</sup> All Commissioners spoke about the need for a "managed transition" to mitigate risks of noncompliance or unintended consequences to the system and to customers, particularly low-income customers.<sup>52</sup> The Commission requested further information on any intrinsic value of biogas, denied acknowledgement of NW Natural's request to invest in RNG in lieu of CCIs, and raised a multitude of questions about the company's long-term plan to rely on limited and expensive alternative fuels while continuing to grow its system. It

17

<sup>52</sup> Id.

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>18</sup> 

<sup>&</sup>lt;sup>49</sup> Or. Pub. Util. Comm'n Docket No. LC 76, Acknowledgement of the 2020 Integrated Resource Plan Update, Order No. 23-023 (Feb. 6, 2023).

<sup>&</sup>lt;sup>50</sup> *Id*.

<sup>&</sup>lt;sup>51</sup> Or. Pub. Util. Comm'n Docket No. LC 79, NW Natural 2022 IRP, Commissioner Work Session, 29:52 to 31:00.

also underscored the necessity of avoiding investments in infrastructure if non-pipe solutions (e.g., beneficial electrification and energy efficiency) could be implemented instead.<sup>53</sup>

## V. <u>THE CPP'S IMPACTS ON AVISTA AND THE ASSOCIATED RISKS TO</u> <u>CUSTOMERS</u>

**Q.** Describe Avista's strategy to meet the CPP mandates.

A. In its 2023 IRP, Avista proposes to delay its emissions reductions until nearly halfway through the planning horizon, relying on small amounts of biogas, some energy efficiency, and CCIs until 2030. Beginning in 2030, it justifies reliance on synthetic methane to support continued investments in fossil fuel infrastructure. At that point, Avista relies on unrealistic and rapidly declining costs in methanation and carbon capture to meet its emissions-reduction mandates.<sup>54</sup>

Further, while it agrees in its IRP that "[t]he future of natural gas is facing a fundamental change at Avista, the Pacific Northwest and nations in the climate pledge with the goal to reduce global emissions,"<sup>55</sup> it has filed a petition in the Court of Appeals of State of Oregon seeking to invalidate the CPP.<sup>56</sup>

Concerningly, Avista's opening testimony in this proceeding reads as if the CPP does not exist at all. The company refers to the CPP on one occasion in the entire 2,830-

<sup>&</sup>lt;sup>53</sup> Id.

<sup>&</sup>lt;sup>54</sup> Avista 2023 IRP, Executive Summary at iv.

<sup>&</sup>lt;sup>55</sup> Avista 2023 IRP at 7-14.

<sup>&</sup>lt;sup>56</sup> NW Natural, Avista Corp., and Cascade Natural Gas Corp., Petition for Judicial Review of Administrative Rule, CA No. A178216 (Or. App. 2022).

1		page document. <sup>57</sup> None of the experts testifying in support of the proposed rate increase
2		describes how the company's investments outlined in this filing are consistent with its
3		decarbonization obligations. Instead, as explained further in the testimony of Bradley
4		Cebulko, Avista is taking a business-as-usual approach focused on continued customer
5		growth and increasing demand for gas, while relying on expensive, risky, and
6		commercially unavailable technologies to reduce the company's GHG emission profile in
7		future years. <sup>58</sup>
8	Q.	What risks do Avista's customers face from Avista's supply-side strategy as set
9		forth in its 2023 IRP?
10	A.	The risk of skyrocketing rates and stranded assets to Avista's ratepayers is very real. As I
11		mentioned above, Avista seeks to delay its emissions reductions until nearly halfway
12		through the planning horizon, at which time it relies on synthetic methane.
13		Synthetic methane is produced by combining green hydrogen with carbon
14		dioxide. Accordingly, production of the fuel requires hydrogen produced from
15		renewable-powered electrolyzers with carbon sourced from carbon capture technology.
16		Neither of these processes is yet commercially viable. In fact, only a handful of
17		methanation pilots exist today, and they are very small. Uniper's plant in Germany
18		produces only 600kW of methane. <sup>59</sup> In order for Avista's scheme to work: (1) green

<sup>&</sup>lt;sup>57</sup> See Avista/400, Holland/9.

<sup>&</sup>lt;sup>58</sup> See Ex. Environmental Intervenors/100, Cebulko/10-19.

<sup>&</sup>lt;sup>59</sup> "Green' Methane Pilot Plant Starts Up." Chemical Processing, 3 July 2018, https://www.chemicalprocessing.com/processing-equipment/reactionsynthesis/article/11312596/green-methane-pilot-plant-starts-up.

hydrogen would have to be affordable; (2) carbon capture would have to be affordable; (3) methanation would have to be affordable; (4) renewable energy would have to be abundant; and (5) electricity prices would need to be affordable. In comparison, building electrification is already cost-competitive and the technology is already commercially available.

More importantly, Avista assumes that synthetic methane will be considered a zero-emissions fuel for purposes of CPP compliance. To the contrary, DEQ treats only biomass-derived fuels as a zero emissions fuel.<sup>60</sup> Proposed DEQ rules would treat carbon dioxide that is produced and captured from a waste stream and then sold to create synthetic methane as anthropogenic emissions when combusted. Let me underscore this point. Under DEQ's currently proposed rules, combustion of synthetic methane would generate compliance obligations under the CPP.<sup>61</sup>

While the future cost of synthetic methane is not included as a line-item request in this rate case, the availability, cost, and regulatory treatment of future fuels is relevant to considering whether to approve rate recovery for investments that have extended lifespans, like mains and service lines, that are themselves deriving their prudence from those future fuels.

In short, the CPP requires Avista to provide a cap-compliant IRP and it requires the Commission to reevaluate how it has traditionally considered gas utility investments.

<sup>&</sup>lt;sup>60</sup> ORS 468A.020(3) (certain provisions of ORS chapter 468A "do not apply to carbon dioxide emissions from the combustion or decomposition of biomass").

<sup>&</sup>lt;sup>61</sup> Climate 2023 Rulemaking Advisory Committee, Division 215 Draft Rules (June 27, 2023), https://www.oregon.gov/deq/rulemaking/Documents/c2023m3Rulesghg.pdf.

To facilitate change from the gas utility, the Commission must ensure it sends the right signals to the utility that better align with the state's policies and result in better outcomes for customers. In this proceeding, the Commission is in an ideal position to set a bright line rule denying recovery for fossil fuel investments associated with continued growth, especially when those investments will hamper the company's compliance with the CPP, and deny recovery for pipeline infrastructure that qualifies for downsizing.

# Q. Do you have any general concerns about Avista's plan to encourage customer growth, in light of state and local policy?

A. Yes. In its 2023 IRP, Avista plans to continue installing service lines and mains—pipes which last more than 50 years, which is well beyond when Oregon should be relying on gas to heat buildings. To justify that decision, just as it did in its 2021 IRP, Avista relies on a customer forecast that assumes growth based on what has happened historically.<sup>62</sup> In fact, despite all the policy changes of the past several years, Avista anticipates a higher annual growth in this 2023 IRP (.9%) than it did in its 2021 IRP (.7%).<sup>63</sup> Notably, in its legal challenge to Washington state's building code, Avista executives submitted a sworn statement that customer growth was a "fundamental component" of the utility's business model, and that without continued growth, there will be "increased rates" for existing customers and a "negative feedback loop" with fewer customers and higher rates.<sup>64</sup>

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>18</sup> 

<sup>&</sup>lt;sup>62</sup> Avista 2023 IRP at 2-1.

<sup>&</sup>lt;sup>63</sup> Avista 2023 IRP Presentation to Public Utility Commission, June 29, 2023.

<sup>&</sup>lt;sup>64</sup> Ex. Environmental Intervenors/204; Declaration of Patrick Ehrbar at ¶¶ 5-6, *Rivera v. Wash. State Building Code Council*, E.D. Wash. No. 1:23-cv-03070-SAB.

Indeed, Washington has adopted policies to encourage electrification, a fact acknowledged in Avista's 2023 IRP. However, Avista's 2023 IRP fails to proactively address the inevitable decline in customer demand that will result from this policy change. Instead, it chooses a wait-and-see approach that it says will deliver better actual outcomes in the 2025 IRP. In the meantime, its average demand forecast anticipates adding more customers—as many as 90,000 new customers over twenty years.<sup>65</sup> And it continues to subsidize customer growth and invest in new fossil fuel infrastructure.

It is especially troubling that the company is planning to run down the time for as long as possible without making a concerted effort to embrace electrification as a means of meeting its CPP mandates, serving customers better, and reducing its role in the escalating climate crisis, when the company has modeled electrification as a resource option for its commercial and residential customers.<sup>66</sup> Not only does Avista's IRP reflect the expected electric space heating efficiency, as compared with natural gas, as higher even going down to -15 degrees F,<sup>67</sup> but it also demonstrates significant savings to customers if they capitalize on state and federal incentives to replace gas appliances with electric appliances.

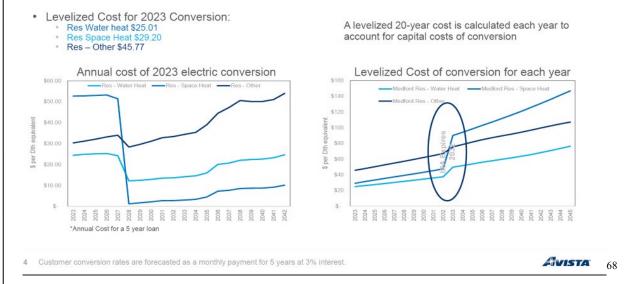
OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>65</sup> Avista 2023 IRP at 2-22.

<sup>&</sup>lt;sup>66</sup> Avista 2023 IRP at 3-14.

<sup>&</sup>lt;sup>67</sup> Avista 2023 IRP at 3-15.

# **Electrification - Medford**



As it relates to this rate case, the Commission has an obligation to interject itself rather than approve continued investments in fossil fuel infrastructure that may not be necessary in the near-term and certainly will not be necessary in the long-term. In this fast-paced climate landscape, consider whether acknowledgement of investments outlined in the company's 2021 IRP is sufficient to demonstrate those investments remain prudent today, especially where unexamined alternatives might avoid unnecessary costs to customers. As I describe further below, Avista has abjectly failed to address how its proposed rate increase, which relies on continued investments in fossil fuel infrastructure and expansion of its customer base, is prudent in light of its obligation to comply with the CPP.

12

1

2

3

4

5

6

7

8

9

10

11

## Q. How could Avista's plan for reducing its GHG emissions affect rates?

<sup>68</sup> Avista IRP Presentation to Public Utility Commission, June 29, 2023.

OPENING TESTIMONY OF CARRA SAHLER UG 461

1 In addition to my concerns about saddling ratepayers with investments in fossil fuel A. 2 infrastructure that will not be used and useful, Avista has stated that it intends to file a 3 "CPP tariff rider" to automatically include the costs of its plan to comply with the CPP. This is for both costs to purchase Community Climate Investments and its costs to 4 5 procure biogas. Avista will file this tariff request on November 1, 2023. Presumably, that 6 rider will increase rates on an annual basis starting on November 1 of each year, to 7 include deferred costs associated with CPP compliance as those investments become used 8 and useful. This means that in addition to this rate increase, customers will also see a rate 9 increase next year specifically for CPP compliance costs, and annual increases associated 10 with Avista's CPP related investments. Since these costs will be approved in a tariff rider, 11 they will not undergo the rigorous prudence review afforded to a general rate case. 12 13

14

Avista's preferred resource strategy for Oregon proposes to continue driving customer growth through infrastructure investments, while investing in high risk, high cost alternatives to gas. This can be seen in the figure below:<sup>69</sup>

<sup>69</sup> Avista 2023 IRP, Exec. Summary at vi.

OPENING TESTIMONY OF CARRA SAHLER UG 461

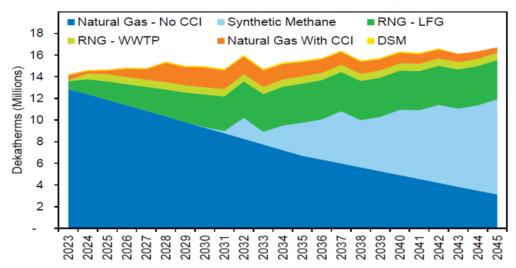


Figure 5: Oregon Preferred Resource Strategy

Concerningly, Avista has not yet purchased any waste-water RNG ("RNG – WWTP") to meet its compliance needs for the 2023-2027 compliance period.<sup>70</sup> To date, Avista has only procured 1 million dekatherms of landfill RNG ("RNG – LFG") to meet compliance needs through 2027, even though the above graph indicates Avista needs to procure at least double that amount.<sup>71</sup> All this indicates that costs to ratepayers will likely accelerate in the next few years because Avista has not adequately planned for its decarbonization transition.

As I discuss above, alternatives to fossil gas are very expensive. The below graph and table, from Avista's 2023 IRP, reflect anticipated prices over the next three decades and compare that cost to the price of fossil gas (referred to as AECO in the graph and table below).<sup>72</sup>

<sup>70</sup> Ex. Environmental Intervenors/205, EG DR 40 Supplemental.
<sup>71</sup> Ex. Environmental Intervenors/206, EG DR 38 Supplemental.
<sup>72</sup> Avista 2023 IRP at 4-23, 4-26.

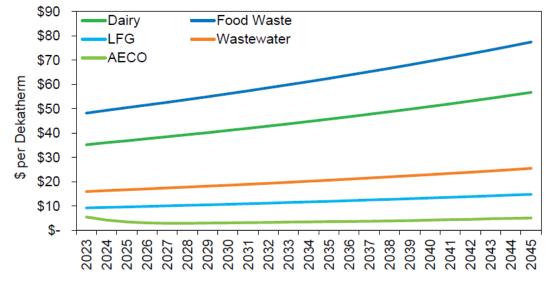
OPENING TESTIMONY OF CARRA SAHLER UG 461 Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

1

Year	Hydrogen	Dairy	Food Waste	LFG	Wastewater	Synthetic Methane	AECO
2025	\$35.43	\$36.84	\$50.43	\$9.62	\$16.68	\$48.35	\$3.43
2030	\$25.20	\$41.05	\$56.15	\$10.72	\$18.54	\$32.90	\$3.03
2035	\$19.05	\$45.72	\$62.49	\$11.93	\$20.60	\$30.48	\$3.55
2040	\$16.09	\$50.92	\$69.56	\$13.28	\$22.91	\$23.13	\$4.19
2045	\$12.19	\$56.71	\$77.43	\$14.79	\$25.47	\$14.84	\$5.05

### Table 4.4: All resource price comparison \$/Dth

#### Figure 4.12: RNG Price by Source (nominal \$)



Even the cheapest alternative, landfill RNG, costs three times as much as fossil gas. Automatically including these costs through a tariff rider could mean ballooning costs for ratepayers on an annual basis.

Given these substantial anticipated future costs, continuing to allow recovery for investments associated with customer growth poses a high risk that Avista's ratepayers will be left with ballooning costs as those with means transition away from gas.

# Q. If you were employing Staff recommendations from the UM 2178 docket, how would you evaluate Avista's request?

OPENING TESTIMONY OF CARRA SAHLER UG 461

A. Both the Commission in recent IRP decisions, and staff in its Final Report in the Natural Gas Fact Finding proceeding, highlighted the need to include assessments of CPP compliance risk in prudency review of distribution system investments.

Due to urgent climate and health concerns, and CPP compliance obligations, further investment in new gas infrastructure or customer growth is imprudent. Avista has an estimated 145 miles of pipe remaining for replacement in Oregon, at an estimated cost of \$173,318,455.<sup>73</sup> Given the policy upheaval since Avista's 2021 IRP, Avista has the burden of showing that its purported need to meet capacity constraints, replace assets that have reached their useful lives, or replace pipe remain prudent.

The Commission has a fundamental responsibility to direct utilities toward a managed transition that avoids stranding ratepayers and assets. Without an evolution in regulatory oversight, the gas utility's incentives will continue to work against the public interest and the Commission risks inviting a turbulent and costly decarbonization of the gas distribution network.

# VI. <u>THE COMMISSION SHOULD DISALLOW RECOVERY FOR CUSTOMER</u> <u>GROWTH COSTS INCLUDING LINE AND MAIN EXTENSIONS</u>

A. Line Extensions

# Q. What is a line extension allowance?

A. A line extension allowance is a subsidy paid for by ratepayers to finance the cost of

building a pipeline to connect a new customer to gas utility service.

<sup>73</sup> Emily Moore, *It's Time for Cascadia to Start Pruning the Gas System and Electrifying Whole Neighborhoods*, Sightline (June 7, 2023) (estimates based on Pipeline Replacement Program documents filed with the Oregon PUC by Avista).

20

A.

## Q. Why do you refer to a line extension allowance as a subsidy?

A line extension allowance is a subsidy because it conflicts with the ratemaking principle of cost causation. The principle of cost causation requires allocation of costs to the customer that causes the cost. Here, the new customer alone is the cost causer, because service lines only benefit the new customer.

I have included as Exhibit Environmental Intervenors/207, the testimony of Edward Burgess that was submitted in Commission Docket No. UG 435. Mr. Burgess provided expert testimony to the Commission describing why the Commission should

eliminate the subsidy for line extensions allowances. As Mr. Burgess explained:

In the case of a newly connecting customer, under the principle of cost causation, 100% of the new service line costs incurred would be attributable to that customer as the "cost causer." If gas system costs were assigned purely based on the principle of cost causation or "beneficiary pays," there would be no need to provide any allowances.... Under such a hypothetical scenario, 100% of the costs would be assigned to that new customer. This direct assignment of costs is not uncommon when performing cost allocation, especially when new distribution facilities are built solely to serve a single customer.<sup>74</sup>

# Q. Why have gas utilities historically been allowed to recover a line extension subsidy?

A. As Mr. Burgess previously explained, there are several policy rationales that historically justified line extension subsidies.<sup>75</sup> However, these policy rationales no longer support providing a line extension subsidy.

First, access to affordable home heating is often a reason to have a line extension allowance. However, in light of the rising cost of gas together with the robust incentives for electric appliances, this rationale no longer applies. Further, Avista customers will

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>74</sup> Ex. Environmental Intervenors/207, Burgess/12.

<sup>&</sup>lt;sup>75</sup> Ex. Environmental Intervenors/207, Burgess/14-16.

likely see skyrocketing gas utility service rates in the future because Avista has not taken steps to control risks and costs related to its CPP obligations.

Second, fossil gas service contributes to GHG emissions in the State of Oregon. Switching to electric air-source heat pumps would reduce GHG emissions from Oregon's building sector, and minimize Oregon's contribution to catastrophic climate change.

Third, subsidizing customer growth historically put a downward pressure on rates, but only once the initial investment in the line extension had been recouped.

## Q. Does subsidizing customer growth still put a downward pressure on rates?

Avista's line extension policy is not justified by this cost recovery principle because: (1) Avista has not provided any calculations or justifications showing that subsidizing customer growth through line extension allowances actually reduces rates in the long term.

(2) The CPP requires Avista to fully decarbonize, which includes any growth in gas demand. Thus, subsidizing growth harms existing ratepayers by increasing the costs to comply with existing regulation. Further, as explained above, rather than reduce demand for gas—the least cost alternative for ratepayers—Avista plans to continue growing its customer base and investing in high-risk technologies at significant cost to ratepayers. In light of that, adding new customers harms ratepayers by burdening them with the significant cost of paying for both subsidizing customer growth and decarbonizing the increased GHG emissions associated with that growth.

## OPENING TESTIMONY OF CARRA SAHLER UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

A.

1	Q.	Have any state utility commissions taken action to reduce line extension subsidies,
2		and why did they take action?
3	A.	Utilities commissions in Washington and California have both addressed line extension
4		allowances for gas utilities.
5		In California, the Public Utilities Commission ordered a phaseout of all line
6		extension allowances for all gas utilities statewide and set the allowable recovery for
7		these costs at \$0 by July 1, 2023. <sup>76</sup> The Commission explained:
8 9 10 11 12 13		These changes move the state closer to meeting its goals of reducing greenhouse gas (GHG) emissions and combating climate change. The result will not only be significant reductions in GHG emissions but also improved quality of life and health for customers, hundreds of millions of dollars in ratepayer savings annually, greater equity for low-income customers, and greater certainty for builders, developers, and individual customers. <sup>77</sup>
14		The major policy reasons motivating the California PUC to eliminate line extension
15		allowances included statewide goals to reduce GHG emissions from the building sector,
16		and legislation that promoted electrification pilot projects for the building sector. The
17		California PUC initiated its rulemaking to promote building alternatives that "could lead
18		to the reduction of greenhouse gas emissions associated with energy use in buildings"
19		consistent with California's statewide goals to achieve carbon neutrality by 2045.78
20		In advocating for eliminating line extension allowances, staff for the California
21		PUC found that continued investment in this subsidy posed significant stranded asset cost
22		risks that would likely be borne by low-income ratepayers:
	<sup>76</sup> Ex. <sup>77</sup> Id.	Environmental Intervenors/208, Sahler/5, CPUC Rulemaking LEA – Order at 2.

<sup>78</sup> *Id.* Sahler/6, Order at 3.

OPENING TESTIMONY OF CARRA SAHLER UG 461

Any new gas infrastructure is likely to become a stranded asset. The maintenance and operational costs associated with gas infrastructure will need to be paid for by a shrinking number of future gas customers, which will be reflected in higher rates. These customers are likely to be low-income customers as they face the greatest barriers to electrification, including affordability challenges presented by the upfront costs of electrification.<sup>79</sup>

Staff for the California PUC further found that eliminating line extension allowances

would (1) reduce GHG emissions from buildings, (2) result in millions of dollars

annually in ratepayer savings on avoided costs, (3) appropriately shoulder costs on the

responsible party by requiring builders or new customers who want gas service to pay for

their own consumer preferences, (4) incentivize all electric construction for new

buildings, (5) provide greater certainty to the builder community, and (6) have minimal

impacts on property prices.<sup>80</sup>

The California PUC agreed with staff on all these findings,<sup>81</sup> and further found

that eliminating line extension allowances would advance equity for low-income

customers:

Eliminating gas line subsidies will advance equity. This occurs given that lowincome customers contribute towards these subsidies through gas rates even though they are typically not the ones applying for, or benefiting from, the gas line subsidies (due to the fact that they are more likely to be renters than homeowners). Equity is advanced by revenue requirements being reduced for everyone, including low-income customers[.]<sup>82</sup>

<sup>&</sup>lt;sup>79</sup> Ex. Environmental Intervenors/208, Sahler/19, CPUC rulemaking LEA Order at 16.

<sup>&</sup>lt;sup>80</sup> *Id.*, Sahler/20-25, CPUC rulemaking LEA Order at 17-22.

<sup>&</sup>lt;sup>81</sup> *Id.*, Sahler/29-33, CPUC rulemaking LEA Order at 26-30.

<sup>&</sup>lt;sup>82</sup> *Id.*, Sahler/33-34, CPUC rulemaking LEA Order at 30-31.

The California PUC estimated that eliminating line extension allowances would save ratepayers approximately \$164 million annually.<sup>83</sup>

In Washington, the enactment of the Climate Commitment Act incentivized gas utilities to decarbonize their service by electrifying existing residential gas customers—as the least-cost, least-risk option for meeting GHG emission reduction targets. Immediately after passage of the Climate Commitment Act, the Washington Utilities and Transportation Commission ("WUTC") issued an order that limited line extension allowances for new gas service connections to \$2,000. Noting the urgent issue of climate change, the Commission described its decision as an "interim measure" and planned to continue its dialog with regulated utilities and interested parties. In subsequent rate cases, the WUTC approved settlements for both Puget Sound Energy and Avista Utilities that eliminate residential line extension subsidies by January 1, 2025.

# Q. Could you please describe relevant portions of the multi-party settlement with Puget Sound Energy that eliminates line extension subsidies in Washington?

 A. The WUTC approved a multi-party settlement in a rate case brought by Puget Sound Energy, in WUTC Docket Nos. UE-220066, UG-220067, & UG-210918 (Consolidated). The Commission eliminated line extension subsidies by January 1, 2025, finding that this settlement condition was lawful and in the public interest.<sup>84</sup> Puget Sound Energy is the largest gas utility service provider in Washington.

<sup>83</sup> Id.

<sup>84</sup> Ex. Environmental Intervenors/209, PSE Settlement Order at page 84-85.

OPENING TESTIMONY OF CARRA SAHLER UG 461

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

## Q. Why is the PSE settlement relevant to this proceeding?

A. Although Washington and Oregon have different laws, both states recently enacted laws that require gas utilities to reduce their GHG emissions consistent with statewide climate goals. In Washington, the WUTC found that eliminating subsidies for new residential gas service line connections would promote reasonable rates and was consistent with the public interest because the decision aligned with the requirements of the Climate Commitment Act. For these same reasons, the Commission should eliminate residential line extension subsidies for gas utility customers in Avista's service territory in Oregon.

## **Q.** What is the Commission's current policy regarding line extension allowances?

A. In 2001, the OPUC issued Order No. 01-1024 modifying OAR 860-021-0050, which requires each utility to individually propose a line extension allowance amount subject to the Commission's approval. Line extension allowances have been individually set by Oregon's gas utilities, and each utility has its own policy.

Last year, in a rate case filed by NW Natural, the Commission revised the line extension subsidy because NW Natural failed to account for costs to the system in light of the company's CPP obligation to abate its GHG emissions.<sup>85</sup> There, the Commission found that the line extension subsidy required downward adjustment because NW Natural failed to demonstrate that its existing policy was prudent.<sup>86</sup>

<sup>86</sup> *Id.* at 48-54.

<sup>&</sup>lt;sup>85</sup> NW Natural Petition for a Rate Increase, Or. Pub. Util. Comm'n Docket No. UG 435, Order No. 22-388 (Oct. 24, 2022).

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

# Q. Could you please describe Avista's line extension allowance policy.

A. For residential and general service lines, Avista "will furnish and install at its own expense" a service pipe "from its gas main to the property line of [private] property abutting upon any public street, highway, alley, lane or road along which it already has or will install street mains[.]"<sup>87</sup> Avista's service line policy contains no limit or financial restriction on the length or cost to construct a service line so long as that construction occurs on public property. Further, Avista will provide for free "a further extension of 40 feet on the private property[.]"<sup>88</sup>

9 **Q**.

When was this policy developed?

A. Avista's service line allowance was inherited from CP National, the prior owner of Avista's Oregon service territory.<sup>89</sup> Avista purchased the company in 1991, and has no records related to when the policy was adopted.

## **Q.** What calculations support Avista's current line extension allowance tariff?

A. Avista has no calculations or data that demonstrate its existing line extension policy is a prudent expense for ratepayers. In response to a data request from the Citizens' Utility Board, Avista admitted that the "Company is unable to provide documentation, testimony and/or workpapers supporting the approval of the [line extension allowance policy] as requested."<sup>90</sup> When specifically asked about the economic justification for its policy,

<sup>87</sup> Ex. Environmental Intervenors/210, EG DR 14, Attachment A.

<sup>88</sup> Id.

<sup>89</sup> Ex. Environmental Intervenors/211, CUB DR 1.

<sup>90</sup> Id.

Avista admitted that the "Company is unable to provide documentation supporting the economic justification" for its line extension policy.<sup>91</sup>

## **Q.** What is the most expensive service line built by Avista to connect a new customer?

- A. The most expensive cost incurred by Avista to connect a new residence to gas utility
  - service occurred in 2022 and was \$17,828.56.92 Of this total amount, ratepayers were
- responsible for 6 7 8 to connect a 9 single customer to gas utility service, including the financing cost for return on equity 10 depreciated over a 40 year period. 11 **Q**. How much of Avista's gas plant expenditures are for line extension subsidies? As of December 31, 2021, service lines constitute \$130 million of total current gas plant 12 A. 13 expenditures, and 28% of total gas plant costs for distribution in Oregon's service territory.<sup>93</sup> 14

## Q. How much of Avista's rate increase is for line extension allowances and customer growth costs?

A. Of the total \$55 million increase requested by Avista, \$21 million is for infrastructure costs to serve new customer growth, for the period of October 1, 2022, through

December 31, 2024.<sup>94</sup>

1

2

3

4

5

15

16

17

18

19

- <sup>91</sup> Ex. Environmental Intervenors/213, CUB DR 2.
- <sup>92</sup> Ex. Environmental Intervenors/214, EG DR 13.
- <sup>93</sup> Ex. Environmental Intervenors/216, Staff DR 184, Attachment A.
- <sup>94</sup> Avista/600, Benjamin/9.

OPENING TESTIMONY OF CARRA SAHLER UG 461

- 1 || Q. Does Avista earn a rate of return on its line extension allowance costs?
  - A. Yes. Avista treats new service line costs as a capital expenditure.

## Q. Is Avista's generous line extension allowance policy a fair cost to impose on ratepayers?

A. No. First, as the utility requesting recovery from ratepayers, Avista has the burden of proof to demonstrate its line extension allowance policy is prudent, and that it is reasonable to charge ratepayers for the costs.<sup>95</sup> Avista has not provided any such demonstration and, in fact, admits that it lacks any supporting evidence to justify the prudency of its current policy.

Second, Avista's line extension subsidy is excessively generous, allowing the utility to recover all costs from ratepayers without any demonstration that the revenue generated by the additional customer would financially benefit ratepayers. This has meant charging ratepayers as much as

for a single service line, and on average charging ratepayers \$6,409<sup>96</sup> for each new customer—for the service line alone. Under the principle of cost causation, the new customer should be responsible for all of these costs because only the new customer benefits from the new service line.

Third, the exorbitant cost of Avista's line extension allowance will fall disproportionately on low-income ratepayers who often are not the beneficiaries of these lucrative subsidies. Many low-income customers are renters and do not derive any

<sup>96</sup> Ex. Environmental Intervenors/106, CUB DR 5.

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>95</sup> NW Natural Petition for a Rate Increase, Or. Pub. Util. Comm'n Docket No. UG 435, Order No. 22-388 (Oct. 24, 2022).

1		financial benefit from a line extension allowance. Yet, they are not only forced to pay
2		this cost but also often have no choice or opportunity to substitute their fuel choice with
3		electric alternatives. Disproportionately burdening these ratepayers who already struggle
4		to pay their energy bills with the runaway costs of Avista's line extension subsidy is
5		fundamentally unfair, as succinctly explained by the California Public Utilities
6		Commission.
7	Q.	Are line extension subsidies an appropriate cost to recover from ratepayers in light
8		of laws and policies to reduce greenhouse gas emissions?
9	A.	No. As explained earlier in my testimony, continued investment in gas customer growth
10		is a risky investment that will result in stranded assets. In its decision to eliminate line
11		extension allowances, the California Public Utilities Commission affirmed its staff
12		recommendation to eliminate line extension allowances out of concern that continuing to
13		subsidize gas customer growth imposed stranded asset risks on ratepayers:
14 15 16 17		[A]ny system buildout today could become a stranded asset well before the end of the asset's life because of electrification — whether mandated by state or local building codes or inspired by ratepayer-funded incentive programs and market transformation. <sup>97</sup>
18		Further, continuing to subsidize customer growth for gas utility service
19		undermines Oregon's climate laws. Methane is a powerful climate warming pollutant,
20		and the Commission should eliminate all subsidies that encourage continued growth in
21		the usage of gas utility service.
	$\frac{1}{97}$ Ex	. Environmental Intervenors/208, Sahler/54, CPUC rulemaking LEA Order at 51.

OPENING TESTIMONY OF CARRA SAHLER UG 461

1		Lastly, as I explained above, Avista is taking a business as usual approach to
2		continue growing gas demand, rather than investing in least-cost, least-risk solutions to
3		reduce gas demand through electrification alternatives. Subsidizing customer growth is
4		especially risky, in light of Avista's chosen pathway to comply with the CPP. In light of
5		this risk, the Commission should eliminate the line extension subsidy to reduce risk to
6		ratepayers.
7	Q.	What cost should Avista be able to recover from rate payers for line extension costs?
8	A.	\$0.
9	Q.	Is reducing the line extension allowance to \$0 consistent with the Commission's
10		order in Docket No. UG 435?
11	A.	Yes. There, the Commission found that downward adjustment of the line extension
12		allowance subsidy was appropriate when the utility fails to provide evidence showing its
13		existing policy is prudent.
14	Q.	Would setting the line extension allowance at \$0 prohibit customers from choosing
15		to connect to gas utility service?
16	A.	No. Ending line extension allowances does not infringe upon a customer's choice, it only
17		removes the subsidy. Studies prepared by NW Natural show that customers are willing to
18		pay as much as \$50,000 to connect their home to gas utility service. <sup>98</sup> These customers
		2% of recent and prospective homebuyers surveyed said they would incur an additional cost 0,000 (an 11% premium based on a mean home value of \$456,300) for a home with natural
	gas he	eating and cooking, versus a lower-priced home with all electric heating and cooking." NW
		al, <i>Homebuyer Energy Preference</i> , <u>https://www.nwnatural.com/get-natural-gas/homebuyer-y-preference</u> .
	OPEN	NING TESTIMONY OF CARRA SAHLER Earthjustice

should bear the cost for their personal preferences. It is neither fair nor reasonable to impose these costs on all ratepayers.

## B. Main Extensions

**Q.** What are main extensions?

1

2

3

4

5

6

7

8

17

18

19

A.

Main extensions are a gas plant expenditure where the main gas line is extended to provide additional service to new customers. These lines are constructed along public streets, roads and highways which Avista has the legal right to occupy.

## **Q.** Are main extensions a customer growth cost?

9 A. Main extensions connect new customers to gas utility service, so they are a customer 10 growth cost. The Long Run Incremental Study ("LRIC Study") quantifies "newcustomer-related plant investments."99 Specifically with regard to main extensions, the 11 LRIC study describes "[t]ypical natural gas main extensions are quantified in terms of the 12 size and length of pipe recently provided for customers, multiplied by recent costs for 13 each pipe size."100 According to Avista's LRIC study, the incremental investment cost of 14 providing a new main extension to a residential customer is \$3,948.00.<sup>101</sup> This cost is in 15 16 addition to the cost of the service line and the cost of the service meter.

**Q.** Does Avista earn a rate of return for its investments into main construction?

# A. Yes. Construction of mains constitutes a capital expenditure for which Avista earns a return on equity.

<sup>99</sup> Avista/900, Anderson/5.

<sup>100</sup> Avista/900, Anderson/5-6.

<sup>101</sup> Avista/901, Anderson/2.

OPENING TESTIMONY OF CARRA SAHLER UG 461

1	Q.	What is the expected lifetime of main extensions?	
2	A.	The expected lifetime of this infrastructure investment is 56 years. <sup>10</sup>	2
3	Q.	Main construction constitutes how much of gas plant expenditure	res?
4	A.	As of December 31, 2021, main lines constitute \$270 million of tota	l current gas plant
5		expenditures and is 58% of total gas plant costs for distribution in O	regon's service
6		territory. <sup>103</sup>	
7	Q.	What is Avista's current policy regarding main extensions?	
8	A.	Avista's current policy regarding main extensions is described in Ru	le No. 15. <sup>104</sup> This
9		rule provides that Avista will charge all ratepayers for the cost to ex	tend a main line
10		under the following circumstances:	
11 12 13 14		Gas main extensions will be made by the Company, provided the cost of the required extension from existing distribution mains to the served does not exceed three (3) times the estimated annual group determined by the Company[.] <sup>105</sup>	he premises to
15	Q.	How is Avista applying its main extension policy in practice?	
16	A.	Avista does not appear to be applying its own main extension policy	in practice. In
17		testimony, Avista described the average cost to connect a new reside	ential customer to the
18		gas system in its LRIC Study. These average costs to connect new c	ustomers were based
19		on "size of pipe typically needed for the type of customer." <sup>106</sup> The L	RIC study quantifies
20		the average main extension cost for new customers by type, including	ng residential.
	$\frac{102}{102}$ Ex.	. Avista/901 at 2.	
		. Environmental Intervenors/216, Staff DR 184, Attachment A.	
		. Environmental Intervenors/210, EG DR 14, Attachment A.	
	105 Id.		
		ista/900, Anderson/5.	
	OPEN UG 46		Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

However, when asked to provide an example of workbooks and calculations applying its policy to residential customers, Avista could not provide any. Avista was asked to provide "four sample calculations, workbooks, or workorders that detail 'three (3) times the estimated annual gross revenue' from December 2022- March 2023 in Oregon" as described in Rule 15.<sup>107</sup> In response, Avista stated, "Main extensions for residential customers are extremely rare."<sup>108</sup> This response contradicts the Company's opening testimony and its LRIC study, which states that main extensions are a routine expenditure for new customer growth. It also indicates that the company is not applying Rule 15 in practice as it was unable to provide even four examples where it evaluated whether to construct a new main line using the revenue formula described in Rule 15.

Concerningly, when asked to identify the amount of main line installed to connect a new customer, the company stated that "Avista does not track the number of new main lines installed in relation to new customers, however, we do track the total length of new main pipe installed[.]"<sup>109</sup>

## Q. What are your concerns with how Avista is applying its main extension policy?

A. First, I am concerned that Avista is building main lines to connect new customers without conducting the cost-effectiveness calculation described in Rule 15 that restricts when a main line may be extended. Thus, ratepayers are being charged for main extension

<sup>108</sup> *Id*.

<sup>109</sup> Ex. Environmental Intervenors/217, EG DR 15.

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>107</sup> Ex. Environmental Intervenors/211, CUB DR 1.

construction costs, even if they exceed the revenue calculations identified by the company.

Second, I am concerned that Avista is making significant customer growth expenditures to connect new residential customers to gas utility service through the construction of main extensions. For the same reasons described above, subsidizing infrastructure costs to add new customers to gas utility service is no longer cost-effective for ratepayers and is contrary to Oregon's climate laws.

# Q. What are your recommendations to the Commission regarding the recovery of construction costs for mains?

A. First, I recommend the Commission require Avista to track the amount of main lines that are constructed to connect new customers. Second, I recommend that the Commission prohibit Avista from recovering costs to extend mains to connect new residential customers. In light of the need for Avista to reduce its GHG emissions, it is no longer cost-effective for ratepayers to subsidize the construction of main extensions to connect new residential customers to gas utility service.

16

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

17

18

19

20

21

## VII. <u>FINAL THOUGHTS MOVING FORWARD</u>

## Q. Do you have any final thoughts?

A. Avista's 2023 IRP recognizes that decarbonization policies will affect how it moves forward. Avista's rate case barely addresses this new reality. As a result, Avista is seeking a rate increase to raise revenue for purposes that do not benefit ratepayers and are not in the public interest.

OPENING TESTIMONY OF CARRA SAHLER UG 461

The Supreme Court's opinion in *Market Street Railway Co. v. Railroad Comm'n* of *California*<sup>110</sup> offers guidance to the Commission about how it should determine gas utility rates of return in this new climate reality. Like the streetcar company faced with increased competition from other transportation providers in the *Market Street Railway* case, Avista risks reliance on "obsolete" technologies and "indifference to public need," and the risk that higher rates will discourage customers.<sup>111</sup> The Supreme Court confirmed that state regulatory commissions are not obligated to set rates to protect a company's credit if the value of the company's stock is already impaired. Rate regulation does not have to protect or restore values or profits "that have been lost by the operation of economic forces,"<sup>112</sup>

I urge the Commission to consider using the framework offered by the *Market Street Railway* case when evaluating requested rate of equity increases and rate increases in general, in the future. If the utility's financial situation is negatively impacted by market forces or policies directed at mitigating the climate crisis, the Commission should not feel obligated to burden ratepayers with the costs to save the utility from itself.

## VIII. <u>CONCLUSION</u>

Q. What are your recommendations to the Commission?

A. I recommend that service and main line extension allowances be set at \$0. I recommend that the Commission adopt regulatory tools, described more fully in Bradley Cebulko's testimony, to avoid investing in pipeline infrastructure when downsizing is more cost-

<sup>112</sup> *Id.* at 567.

OPENING TESTIMONY OF CARRA SAHLER UG 461

<sup>&</sup>lt;sup>110</sup> Market Street Railway Co. v. Railroad Comm'n of Cal., 324 U.S. 548 (1945).

<sup>&</sup>lt;sup>111</sup> *Id.* at 556.

effective and consistent with climate policy. I recommend that investments made after

adoption of the CPP related to expansion of the gas system be deemed imprudent.

## Q. Does this conclude your direct testimony?

A. Yes, it does.

1

2

3

4

OPENING TESTIMONY OF CARRA SAHLER UG 461

## WITNESS QUALIFICATION STATEMENT

NAME:Carra SahlerEMPLOYER:Green Energy Institute at Lewis & Clark Law SchoolTITLE:Interim Director and Staff AttorneyADDRESS:10101 S. Terwilliger Blvd., Portland, Oregon 97219EDUCATION:J.D., Lewis & Clark Law School

**EXPERIENCE:** The Green Energy Institute at Lewis & Clark Law School is a climate policy and energy law organization housed within Lewis & Clark Law School's Environmental, Natural Resources, and Energy Law Program. Our mission is to develop equitable, comprehensive, and effective strategies to prevent catastrophic climate change by furthering the just transition to a sustainable, carbon-free energy grid. Our analyses and recommendations aim to hasten the energy transition by strengthening existing policies, eliminating barriers, and promoting innovative new strategies.

In support of GEI's mission, I have provided testimony or comments in a variety of Public Utility Commission dockets beginning in 2020. I participated in the PUC's Executive Order 20-04 implementation, including the Natural Gas Fact Finding (UM 2178) and the community solar program (UM 1930). I also participated in the PUC's implementation of Oregon laws, including HB 2475, HB 2021, and HB 2165. I have attended nearly all of the gas utility Integrated Resource Planning workshops for the past three years, and I coordinated and led an intervention in NW Natural's 2022 IRP. In 2022, I operated as local counsel in NW Natural's General Rate Revision, representing a coalition of climate and environmental justice organizations. I recently submitted comments on Cascade's IRP to the Washington Utilities and Transportation Commission. I served as Amy Schlusser's alternate on DEQ's Rulemaking Advisory Committee for the Climate Protection Program, attending all of the meetings and assisting in preparation of comments. I currently serve on DEQ's 2023 Climate Rulemaking Advisory Committee to inform possible revisions to the rules.

## CARRA SAHLER

sahler@lclark.edu

(971) 213-9480

### Oregon and Washington State Bar, member

## **RELEVANT EXPERIENCE**

### Green Energy Institute at Lewis & Clark Law School

Interim Director and Staff Attorney

- Engage in regulatory proceedings at the Oregon Public Utility Commission to support a transition away from fossil fuels and toward a sustainable, carbon-free energy grid.
- Provide legal and technical support to organizations interested in a just energy transition.
- Develop creative and ambitious policy solutions for climate and environmental justice advocates, and for local and state policymakers.
- Regularly present on climate policies, including: Money, Money, Money: How Gas Utilities Could Chase IRA Dollars; The Path to 2050: A Policy pathway for Decarbonizing Oregon's Economy, Capping Greenhouse Gas Emissions: Oregon's Climate Protection Program, and False Fossil Fuel Solutions.
- Draft and submit grant applications to support operation of the organization.

### Lewis & Clark Law School

Director of Public Interest Law

- Informed and counseled over 200 students about public interest careers and funding options. .
- Created and presented career-related programming to students.
- Organized and coordinated the NW Public Service Career Fair.
- Managed the allocation of over \$100,000 in Federal Work-Study funds.
- Advised the student-run Public Interest Law Project, including the Annual Auction raising over \$60,000 annually in public interest stipends for law students.

#### U.S. District Court for the District of Oregon

Law Clerk for Garr M. King

- Researched and drafted bench memoranda and judicial opinions in federal civil and criminal cases, . resolving simple procedural issues as well as complex analytical questions.
- For accurate case resolution, quickly developed expertise in habeas corpus, patent and trademark infringement, federal and state constitutional protections, and regulatory schemes covering social security, employment, and environmental protections.
- Evaluated materials, resolved motions, and prepared jury instructions in about a dozen trials.
- Prioritized workload and managed 100 civil and 150 criminal cases at any one time.
- Collaborated with judges, staff, and externs.

Preston Gates & Ellis, LLP (now K&L Gates)	Portland, OR
Associate	Sept. 2002 – Dec. 2004
Law Clerk	June 2001 – June 2002

General Counsel for Oregon and Washington municipalities, advising on land use, municipal authority, and constitutional and statutory construction.

Portland, OR Apr. 2017 – Sept. 2020

Portland, OR Jan. 2005 – Apr. 2017

Sept. 2020 - present

Portland, OR

CARRA SAHLER Page two

- Researched and drafted pleadings in state and federal courts and in administrative proceedings.
- Counseled clients on compliance with environmental laws, and facilitated regulatory negotiations and permitting.

#### Pacific Environmental Advocacy Center (now Earthrise Law Center)

Law Clerk

Assisted with environmental litigation, including cases brought under the Endangered Species Act, Clean Water Act, and National Environmental Policy Act.

COMMUNITY SERVICE

We the People Franklin High School

Constitution Team Coach

Teach diverse groups of seniors for competition testing their knowledge of constitutional principles.

#### U.S. District Court of Oregon Historical Society

Board of Directors, Events Chair, Membership Chair, Secretary

- Chaired and coordinated planning of several annual events, hosting 400 to 500 lawyers and judges.
- Authored articles for the Oregon Benchmarks newsletter: An Evening with the Great Dissenters (2014); 800 Candles for Magna Carta (2015); Kernan Bagley: Fifty Years of Service (2015); USDCHS Annual Picnic: History, Hospitality, and Hops (2019).
- Developed and implemented membership initiatives; managed membership database.

#### PUBLICATIONS

- Nick Caleb, Caroline Cilek, Devin Kesner, & Carra Sahler, Regulating Natural Gas in Oregon Buildings: A Guide for Local Governments (Feb. 2023).
- Amy Schlusser, Carra Sahler, & Rachel Pemberton, Building Bridges to Oregon's Transportation Future: A Comprehensive Guide to Raising and Spending Highway Revenues Under the Oregon Constitution (July 2022).

#### **EDUCATION**

#### Lewis & Clark Law School

J.D., May 2002; GPA: 3.72; Rank: 5/99; magna cum laude

- Environmental Law Review, Associate Editor
- Cornelius Honor Award
- University of Denver Environmental Moot Court Competition, Winner, 2001
- Outstanding Appellate Brief, First Year Moot Court Program
- Public Interest Law Project, member
- Northwest Environmental Defense Center, member and Public Lands Leader

#### **Smith College**

Northampton, MA B.A. Sociology, 1997; GPA: 3.5; Mendenhall Award for the best history paper outside of a seminar.

#### London School of Economics

1995-96

London, England

Portland, OR

Portland, OR 2008 - 2019

Portland, OR

2007 - 2009, 2015 - present

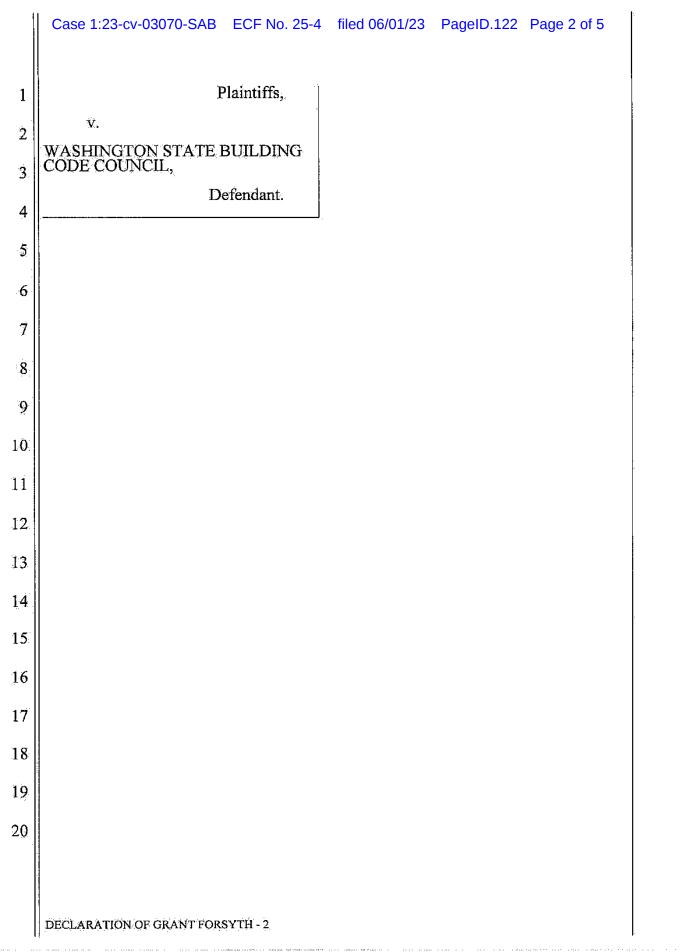
Portland, OR

Summer 2000

## Environmental Intervenors/203 Sahler/1

Case 1:23-cv-03070-SAB ECF No. 25-4 filed 06/01/23 PageID.121 Page 1 of 5 1 BAKER BOTTS L.L.P. 2 Megan H. Berge (DC Bar No. 983714) (pro hac vice) Thomas Jackson (DC Bar No. 384708) (pro hac vice) 3 Scott Novak (DC Bar No. 1736274) (pro hac vice admission pending) 700 K Street NW 4 Washington, D.C. 20001 202-639-1308 5 megan.berge@bakerbotts.com thomas.jackson@bakerbotts.com 6 scott.novak@bakerbotts.com 7Francesca Eick (WA Bar No. 52432) 401 S 1st, Suite 1300 8 Austin, TX 78704 512-322-2672 9 francesca.eick@bakerbotts.com Counsel for the Utilities 10 UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF WASHINGTON 11 JAMON RIVERA, an individual; INLAND NW AGC, a membership organization; SPOKANE HOME BUILDER'S ASSOCIATION, a 12 No. 1:23-cy-03070-SAB **DECLARATION OF GRANT** 13 FORSYTH nonprofit corporation; WASHINGTON STATE 14 ASSOCIATION OF UA PLUMBERS, PIPEFITTERS AND HVAC/R 15 SERVICE TECHNICIANS, a labor organization; CONDRON HOMES LLC, a limited liability company; PARAS HOMES LLC, a limited liability company; GARCO CONSTRUCTION INC., a for-profit 16 17 corporation, NATIONAL PROPANE GAS ASSOCIATION, a national trade 18 association, CITIZEN ACTION DEFENSE FUND, a nonprofit corporation; AVISTA 19 CORPORATION; CASCADE NATURAL GAS CORPORATION; AND NORTHWEST NATURAL 20GAS COMPANY, **DECLARATION OF GRANT FORSYTH - 1** 

Environmental Intervenors/203 Sahler/2



Case 1:23-cv-03070-SAB ECF No. 25-4 filed 06/01/23 PageID.123 Page 3 of 5

## **Declaration of Grant Forsyth**

1

1. I am the Senior Forecaster and Economist for Avista Corporation, d/b/a Avista
3 Utilities ("Avista").

4
2. I have personal knowledge of the facts set, below, and I am competent to
5
testify herein.

3. Sections C403.1.4, C404.2.1, Table C407.2, C502.2.4, C502.2.5, C503.4.6,
C503.5, R403.5.7, R403.13, Table R405.2(1), R503.1.2, R503.1.3, R502.3.2, and
R502.3.3 ("Appliance Restrictions") of the Washington State Energy Code ban in
many instances gas space and water heating appliances in residential and
commercial buildings As further explained in this declaration, these Appliance
Restrictions have caused, and will continue to cause, Avista significant, irreparable
harm.

4. Previously, in 2020-2022, Avista added 6,811 new natural gas customers to
its customer base in Washington.

15 5. As a result of the Appliance Restrictions, Avista projects that it will face a
16 significant decline in its customer growth levels, as the Appliance Restrictions
17 permanently cap Avista's future customer growth. On the residential and
18 commercial sides combined, Avista projects that the Appliance Restrictions will
19 cause a loss of 13,458 customers it would otherwise have between 2024-2030. After

DECLARATION OF GRANT FORSYTH - 3.

Case 1:23-cv-03070-SAB ECF No. 25-4 filed 06/01/23 PageID.124 Page 4 of 5

2024, Avista projects that Washington gas customer growth will reduce to a small
 fraction of new customers. The chart below details these projections:

Quanti	fying Projected	Lost Gas Meters
Washington	7 Year Total (2024-2030)	7 Year Average (2024-2030)
Residential	12,593	1,799
Commercial	865	124
Total	13,458	1,923

3

4

5

6

6. On the residential side, without the Appliance Restrictions, Avista forecasts it 7 would have approximately 13,352 new residential customers between 2024-2030. 8 With the Appliance Restrictions, it is reasonable to assume that Avista will only 9 supply natural gas to a small fraction of new customers, namely those who want gas 10 amenities not banned by the Washington State Energy Code, such as fireplaces and 11 stoves. Avista projects it would lose approximately 12,593 residential customers 12 over this seven-year period as a result of the Appliance Restrictions. 13 7. On the commercial side, without the Appliance Restrictions, Avista forecasts 14 it would have approximately 917 new commercial customers between 2024-2030. 15 Avista projects it would lose approximately 865 commercial customers over this 16 seven-year period as a result of the Appliance Restrictions. 17 8. These negative impacts of the Appliance Restrictions pose significant harm to 18 Avista. 19 9. I declare, under penalty of perjury, that the foregoing is true and correct. 20

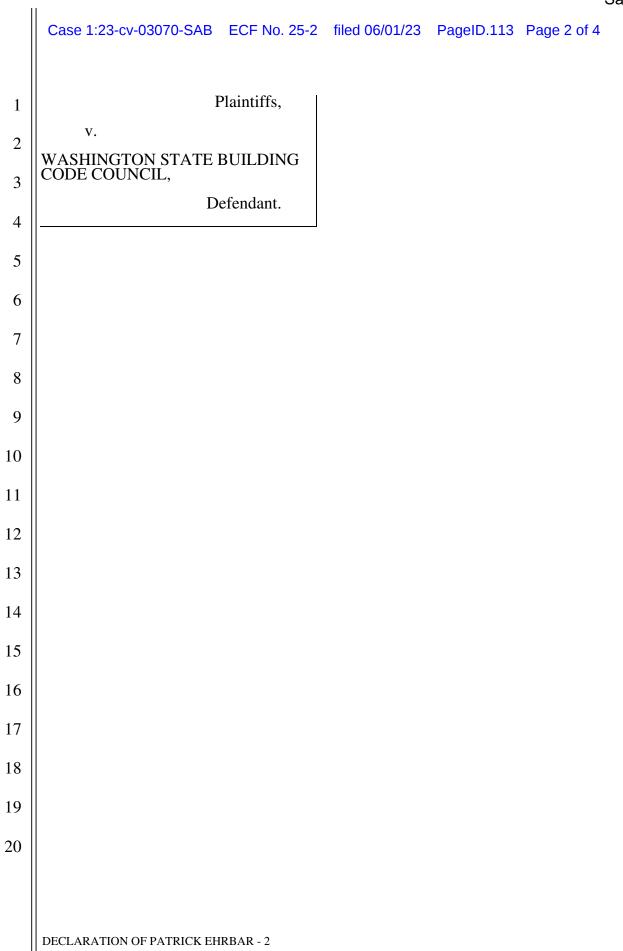
## Environmental Intervenors/203 Sahler/5

Case 1:23-cv-03070-SAB ECF No. 25-4 filed 06/01/23 PageID.125 Page 5 of 5 Executed on June 1, 2023:  $\ddot{2}$ Grant Forsyth Senior Forecaster and Economist Avista Corporation, d/b/a Avista Utilities **DECLARATION OF GRANT FORSYTH - 5** 

## Environmental Intervenors/204 Sahler/1

Case 1:23-cv-03070-SAB ECF No. 25-2 filed 06/01/23 PageID.112 Page 1 of 4 1 BAKER BOTTS L.L.P. 2 Megan H. Berge (DC Bar No. 983714) (pro hac vice) Thomas Jackson (DC Bar No. 384708) (pro hac vice) 3 Scott Novak (DC Bar No. 1736274) (pro hac vice admission pending) 700 K Street NW 4 Washington, D.C. 20001 202-639-1308 5 megan.berge@bakerbotts.com thomas.jackson@bakerbotts.com 6 scott.novak@bakerbotts.com 7 Francesca Eick (WA Bar No. 52432) 401 S 1st. Suite 1300 8 Austin, TX 78704 512-322-2672 9 francesca.eick@bakerbotts.com Counsel for the Utilities 10 **UNITED STATES DISTRICT COURT** 11 FOR THE EASTERN DISTRICT OF WASHINGTON 12 JAMON RIVERA, an individual; No. 1:23-cv-03070-SAB INLAND NW AGC, a membership organization; SPOKANE HOME BUILDER'S ASSOCIATION, a **DECLARATION OF PATRICK** 13 **EHRBAR** nonprofit corporation; WASHINGTON STATE ASSOCIATION OF UA PLUMBERS, PIPEFITTERS AND HVAC/R 14 SERVICE TECHNICIANS, a labor 15 organization; CONDRON HOMES LEC, a limited liability company; 16 PARAS HOMES LLC, a limited liability company; GARCO CONSTRUCTION INC., a for-profit 17 corporation, NATIONAL PROPANE GAS ASSOCIATION, a national trade association, CITIZEN ACTION DEFENSE FUND, a nonprofit 18 corporation; AVISTA CORPORATION; CASCADE NATURAL GAS CORPORATION; AND NORTHWEST NATURAL 19 20 GAS COMPANY,

## Environmental Intervenors/204 Sahler/2



Case 1:23-cv-03070-SAB ECF No. 25-2 filed 06/01/23 PageID.114 Page 3 of 4

1

## **Declaration of Patrick Ehrbar**

2 1. I am the Director of Regulatory Affairs for Avista Corporation, d/b/a Avista
3 Utilities ("Avista").

4 2. I have personal knowledge of the facts set out below, and I am competent to
5 testify herein.

3. Sections C403.1.4, C404.2.1, Table C407.2, C502.2.4, C502.2.5, C503.4.6,
C503.5, R403.5.7, R403.13, Table R405.2(1), R503.1.2, R503.1.3, R502.3.2, and
R502.3.3 ("Appliance Restrictions") of the Washington State Energy Code ban in
many instances gas space and water heating appliances in residential and
commercial buildings. As further explained in this declaration, these Appliance
Restrictions have caused, and will continue to cause, Avista significant and
irreparable harm.

4. The Appliance Restrictions threaten to impose a permanent cap on Avista's
customer growth. Customer growth is a fundamental component of the utility
business model. Each year, we make significant and necessary investments in our
system to ensure safety, reliability, and resiliency. Customer growth helps ensure
that those costs can be spread over a growing customer base and help keep costs for
all of our customers at an affordable level.

19

20

5. By curtailing customer growth, the Appliance Restrictions impede our ability to spread the cost of new investment in maintaining our natural gas system, and

Case 1:23-cv-03070-SAB ECF No. 25-2 filed 06/01/23 PageID.115 Page 4 of 4

- instead centralize those costs in fewer and fewer customers. That results in increased
   rates for existing customers, who are forced to assume a greater share of the costs to
   maintain our system.
- 6. As customer rates increase, natural gas becomes less competitive compared
  to other energy services, and incentivizes more customers to rely on electrical
  services. This creates a negative feedback loop, which further reduces customer
  growth and retention, further impacts affordability, and ultimately creates substantial
  and irreparable harm for both Avista and its customers.
- 9 7. I declare, under penalty of perjury, that the foregoing is true and correct.
- 10 Executed on June 1, 2023:

11 Shla 12

Patrick Ehrbar
Director of Regulatory Affairs
Avista Corporation, d/b/a Avista Utilities

## AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	06/01/2023
CASE NO:	UG 461	WITNESS:	Kevin Holland
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Shawn Bonfield
TYPE:	Data Request	DEPT: Natural	Regulatory Affairs
<b>REQUEST NO.:</b>	EG – 040 Supplemental	TELEPHONE:	(509) 495-2782
		EMAIL:	shawn.bonfield@avistacorp.com

## **REQUEST:**

How much waste-water RNG has Avista procured to meet its RNG procurement needs for the next five years (2023-2027)? Please provide your answer on an annual basis.

### **RESPONSE:**

Avista objects to this question because it seeks information that does not relate to issues in this proceeding and is beyond the stated scope of Petitioner's intervention.<sup>1</sup> Avista is not seeking recovery of any RNG costs in this proceeding nor is the selection of RNG alternatives at issue. Those matters may come before the Commission in a later proceeding but are not before the Commission at this time in this docket. Petitioner's request would unduly expand the scope of this proceeding.

### **SUPPLEMENTAL RESPONSE:**

the course of this proceeding."

Without waiving the foregoing objection, the answer is none.

<sup>1</sup> "Petitioners will assess the prudency of investments in gas system maintenance and expansion, policies related to new gas customer additions—especially in light of climate change, and the need to mitigate for stranded asset risks. Petitioners anticipate evaluating policies and expenditures related to energy burden, energy efficiency, weatherization, bill discount rates, and the affordability of gas utility rates for residential customers. Lastly, Petitioners will review investments into gas related advertising, promotion, and outreach efforts by Avista Utilities, to ensure all charges billed to ratepayers are appropriate. Petitioners may also address additional issues that arise in

## AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	06/01/2023
CASE NO:	UG 461	WITNESS:	Kevin Holland
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Shawn Bonfield
TYPE:	Data Request	DEPT: Natural	Regulatory Affairs
<b>REQUEST NO.:</b>	EG – 038 Supplemental	TELEPHONE:	(509) 495-2782
		EMAIL:	shawn.bonfield@avistacorp.com

## **REQUEST:**

How much RNG has Avista procured to meet demand needs for the next five years (2023-2027)? Please provide your answer on an annual basis.

## **RESPONSE:**

Avista objects to this question because it seeks information that does not relate to issues in this proceeding and is beyond the stated scope of Petitioner's intervention.<sup>1</sup> Avista is not seeking recovery of any RNG costs in this proceeding. This matter may come before the Commission in a later proceeding but is not before the Commission at this time in this docket. Petitioner's request would unduly expand the scope of this proceeding.

## SUPPLEMNTAL RESPONSE:

Without waiving the foregoing objection, the answer is illustrated below as the guaranteed volume total from all projects as of June 1, 2023.

	2023	2024	2025	2026	2027
Total Therms of RNG	953,005	991,255	1,024,585	1,055,831	1,088,031

The contract for these totals can be found with the Company's response to EG\_DR\_037.

<sup>1</sup> "Petitioners will assess the prudency of investments in gas system maintenance and expansion, policies related to new gas customer additions—especially in light of climate change, and the need to mitigate for stranded asset risks. Petitioners anticipate evaluating policies and expenditures related to energy burden, energy efficiency,

weatherization, bill discount rates, and the affordability of gas utility rates for residential customers. Lastly, Petitioners will review investments into gas related advertising, promotion, and outreach efforts by Avista Utilities, to ensure all charges billed to ratepayers are appropriate. Petitioners may also address additional issues that arise in the course of this proceeding."

## **BEFORE THE PUBLIC UTILITY COMMISSION**

## **OF OREGON**

## UG 435

) )

In the Matter of

NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL,

Request for a General Rate Revision.

) OPENING TESTIMONY OF) ED BURGESS

## **Opening Testimony of Ed Burgess**

## On Behalf of

Intervenors Coalition of Communities of Color, Sierra Club, Verde, Climate Solutions, Oregon Environmental Council, Columbia Riverkeeper, and Community Energy Project

## April 22, 2022

## TABLE OF CONTENTS

1.	Summary Of Findings And Recommendations	1		
2.	Introduction	2		
3.	Overview Of NW Natural's Line Extension Subsidies And Their Relevance To This Case			
	A. Summary of current line extension policy for NW Natural and Schedule X.	5		
	B. Revenue impact of line extensions in this case and on an ongoing basis	7		
	C. History of line extension policies in Oregon	. 10		
4.	Reconsidering Line Extension Allowances/Subsidies In An Evolving Gas Industry	. 12		
	A. Traditional rationales for line extension allowances/subsidies	. 12		
	<ul> <li>i. Access to home heating:</li> <li>ii. Historical environmental benefits:</li> <li>iii. Downward rate pressure:</li> <li>iv. Redundancy of heating fuels:</li> <li>B. Factors supporting a lower level of allowances/subsidies</li> </ul>	. 13 . 13 . 14		
5.	<ul> <li>i. Cost to other customers</li> <li>ii. Increased cost and volatility of gas prices</li> <li>iii. Stranded cost risk</li> <li>iv. Greenhouse Gas Emissions and Climate Policy</li> <li>v. Availability/affordability of alternatives</li> <li>vi. Indoor air quality</li> <li>vii. Land use and sprawl</li> </ul> The Core Economic Rationale Underpinning Gas Line Extension Subsidies Is Flawed	. 14 . 15 . 16 . 18 . 18 . 19 d.		
	A. Scrutiny of the economic rationale for line extension subsidies	. 20		
	B. NW Natural's Line Extension Calculations	. 22		
	C. Recommendations	. 27		
6.	Summary Of Conclusions/Recommendations To The Commission In This Case	. 27		
	A. Findings	. 27		
	B. Recommendations	. 28		

1	1.	Summary Of Findings And Recommendations
2	Q.	Please provide an overview of your testimony.
3	A.	My testimony examines and critiques NW Natural's ongoing practice for granting line
4		extension allowances. I assess factors that should be considered in this case and going
5		forward and make specific recommendations regarding the Company's future level of
6		line extension allowances.
7	Q.	Please provide a summary of your findings.
8	A.	My findings can be summarized as follows:
9	1.	Oregon's rules regarding line extensions allowances were adopted over 20 years ago,
10		and NW Natural's allowance levels under Schedule X have not been updated in a
11		decade.
12	2.	Line extension allowances likely account for over 65% of NW Natural's distribution
13		system costs for new customer growth, and 6% of the Company's requested rate
14		increase in this case.
15	3.	Significant new concerns have emerged in recent years that suggest the rules and
16		practices for line extensions should be revisited. Some of these concerns include:
17		increased cost and volatility of gas prices, stranded cost risk, greenhouse gas emissions
18		and climate policy, availability and affordability of gas alternatives, indoor air quality,
19		and land use and sprawl.
20	4.	The core economic rationale for continued line extension allowances is largely
21		unsupported and likely results in windfall subsidies to new gas customers.
22	5.	Even if the core economic rationale were accepted, there are significant errors in NW
23		Natural's calculation of appropriate line extension allowances.

DIRECT TESTIMONY OF ED BURGESS - 1 UG 435

1	Q.	Please provide a summary of your recommendations.
2	A.	My recommendations to Commissioner are as follows:
3	1.	Require NW Natural to reduce line extension allowances under Schedule to \$0 going
4		forward.
5	2.	Require that the \$0 allowance be applied to both residential and non-residential
6		customers. At a minimum, some limitation on allowances for non-residential
7		customers should be established.
8	3.	In the alternative to a \$0 allowance, specific improvements to the allowance
9		calculation should be implemented, such as a reduced investment period (i.e., less than
10		15-30 years).
11	4.	A statewide investigation should be launched to examine how appropriate line
12		extension allowances should be set for all gas utilities.
13	2.	<u>Introduction</u>
14	Q.	Please state your name, title, and business address.
15	A.	My name is Ed Burgess. I am a Senior Director at Strategen Consulting. My business
16		address is 2150 Allston Way, Suite 400, Berkeley, California 94704.
17	Q.	Please summarize your professional and educational background.
18	A.	I am a leader on Strategen's consulting team and oversee much of the firm's utility-
19		focused practice for governmental clients, non-governmental organizations, and trade
20		associations. Strategen's team is globally recognized for its expertise in the electric and
21		gas utility sectors on issues relating to resource planning, transmission and distribution
22		planning, renewable energy, energy storage, rate design, cost of service, program design,
23		and utility business models and strategy. During my time at Strategen, I have managed or

DIRECT TESTIMONY OF ED BURGESS - 2 UG 435

1		supported projects for numerous client engagements related to these issues. Before
2		joining Strategen in 2015, I worked as an independent consultant in Arizona and
3		regularly appeared before the Arizona Corporation Commission. I also worked for
4		Arizona State University where I helped launch their Utility of the Future initiative as
5		well as the Energy Policy Innovation Council. I have a Professional Science Master's
6		degree in Solar Energy Engineering and Commercialization from Arizona State
7		University as well as a Master of Science in Sustainability, also from Arizona State. I
8		also have a Bachelor of Arts degree in Chemistry from Princeton University. A full
9		resume is attached as Exhibit Coalition/202.
10	Q.	On whose behalf are you testifying?
11	A.	I am testifying on behalf of the Coalition of Communities of Color, Sierra Club, Verde,
12		Climate Solutions, Oregon Environmental Council, Columbia Riverkeeper, and
13		Community Energy Project.
14	Q.	What is the purpose of your testimony?
15	A.	The purpose of my testimony is to examine NW Natural's current and ongoing practice
16		of providing service line extension allowances and including those allowance costs as a
17		component of its requested rate increase in this case. I explain factors that have
18		historically supported such policies as well as new factors that should be considered
19		going forward and make specific recommendations regarding the future level of line
20		extension allowances.
21	Q.	Have you ever testified before this Commission?
22	А.	Yes. I testified in UE 375, and UE 390 which were, respectively, PacifiCorp's 2021 TAM
23		proceeding and 2022 TAM proceeding.

DIRECT TESTIMONY OF ED BURGESS - 3 UG 435

Environmental Intervenors/207 Sahler/6 Coalition/200 Burgess/6

1 **Q**. Have you ever testified before any other state regulatory body? 2 A. Yes. I have testified before the California Public Utilities Commission (Docket Nos. 3 A.19-08-002, A.20-08-002, R.20-11-003, A.21-08-004, A.21-10-010, and A.21-10-011), 4 the Indiana Utility Regulatory Commission (Cause Nos. 38707 FAC 123 S1 and 38707 5 FAC 125), the Louisiana Public Service Commission (Docket No. U-36105), the 6 Massachusetts Department of Public Utilities (D.P.U. 18-150 and D.P.U. 17-140), the 7 Michigan Public Service Commission (Docket No. U-21090), the Nevada Public Utilities 8 Commission (Docket No. 20-07023), the South Carolina Public Service Commission 9 (Docket Nos. 2019-186-E, 2019-185-E, 2019-184-E, and 2021-88-E), and the 10 Washington Utilities and Transportation Commission (Docket No. UE-200900). 11 Additionally, I have represented numerous clients by drafting written comments, 12 presenting oral comments and participating in technical workshops on a wide range of 13 proceedings at utilities commissions in Arizona, California, District of Columbia, 14 Maryland, Minnesota, Nevada, New Hampshire, New York, North Carolina, Ohio, 15 Oregon, Pennsylvania, at the Federal Energy Regulatory Commission, and at the 16 California Independent System Operator. 17 How is your testimony organized? Q. 18 A. My testimony is organized into the following sections: 19 First, I provide an overview of NW Natural's line extension subsidies and their relevance • 20 to this case. 21 Second, I describe the factors in the evolving gas industry that warrant reconsideration of 22 ongoing line extension subsidies.

DIRECT TESTIMONY OF ED BURGESS - 4 UG 435

1	•	Third, I provide a critique of the core economic rationale underpinning these subsidies,
2		and make recommendations regarding how they should be treated going forward.
3	٠	I conclude with a summary of my conclusions and recommendations.
4 5	3.	<u>Overview Of NW Natural's Line Extension Subsidies And Their Relevance To This</u> <u>Case</u>
6		A. Summary of current line extension policy for NW Natural and Schedule X
7	Q.	Can you please summarize NW Natural's current practice of subsidizing line
8		extensions for customers establishing new connections to its system?
9	A.	Yes. For customers newly connecting to NW Natural's system, the Company currently
10		offers "allowances" that substantially reduce or eliminate those customers' cost of
11		constructing a new gas service line. These allowances are defined in NWN's Schedule X,
12		which was last updated in 2014, and the current residential allowance levels were set as
13		part of a stipulation in NW Natural's 2011-2012 general rate case.
14	Q.	What are the current allowance levels for new residential service?

- 15 A. For new residential customers, allowances are set according to the following table
- 16 included in Schedule X:

Category	Description	Notes	Construction Allowance (per Premise)
A	Primary Natural Gas space heating (does not apply to centralized space heating that serves multiple units)	1	\$2,875
В	Primary Natural Gas water heat (does not apply to centralized water heating that serves multiple units) Natural Gas heating fireplace for primary space heating Natural Gas wall heat for primary space heating	2	\$2,100
С	Range, Cook top, Clothes dryer	3	\$ 850
D	Gas barbecue, log lighter, gas log, tiki torch, Bunsen burner, pool, spa, or hot tub water heaters, standby space heating equipment including but not limited to natural gas back-up to electric heat pumps; non-primary space or water heat equipment; equipment installed in a detached garage, shop, or outbuilding	4	\$0

Figure 1. Excerpt from NW Natural's Schedule X

DIRECT TESTIMONY OF ED BURGESS - 5 UG 435

1		Any construction costs for a service line extension that exceeds these amounts would be
2		the customer's responsibility.
3	Q.	What are the current allowance levels for new non-residential service?
4	А.	Unlike residential allowances, non-residential allowances are not prescribed by Schedule
5		X. For non-residential customers, the schedule simply states that the utility will perform
6		an investment analysis to determine the allowance. Moreover, it states that this allowance
7		will "at a minimum" equal five times the annual margin revenue generated from the
8		customer. In contrast to the residential allowances, there does not appear to be any clear
9		limitation on non-residential allowances based on the language in the schedule. I believe
10		this constitutes a highly inappropriate cross-subsidy that should be remedied in this
11		proceeding.
12	Q.	Why does this constitute a cross-subsidy?
12 13	<b>Q.</b> A.	Why does this constitute a cross-subsidy? In both the residential and non-residential cases, the line extension allowances amount to
13		In both the residential and non-residential cases, the line extension allowances amount to
13 14		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by
13 14 15		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by other gas customers through base rates. As the Company explains in response to
13 14 15 16		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by other gas customers through base rates. As the Company explains in response to Coalition DR 90: "For amounts not collected from the customer, installation costs are
13 14 15 16 17		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by other gas customers through base rates. As the Company explains in response to Coalition DR 90: "For amounts not collected from the customer, installation costs are capitalized and would be proposed for recovery by the Company in future general rate
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by other gas customers through base rates. As the Company explains in response to Coalition DR 90: "For amounts not collected from the customer, installation costs are capitalized and would be proposed for recovery by the Company in future general rate case filing and if approved, recovered from all ratepayers in new base rates." (Exhibit
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>		In both the residential and non-residential cases, the line extension allowances amount to a cross-subsidy whereby the benefit to new gas customers is ultimately being paid for by other gas customers through base rates. As the Company explains in response to Coalition DR 90: "For amounts not collected from the customer, installation costs are capitalized and would be proposed for recovery by the Company in future general rate case filing and if approved, recovered from all ratepayers in new base rates." (Exhibit Coalition/207). In the case of residential customers, the amount of cross-subsidy per

#### DIRECT TESTIMONY OF ED BURGESS - 6 UG 435

1	Q.	In addition to the residential and non-residential allowances, are there other
2		subsidies provided to new customer connections through Schedule X?
3	А.	Yes. In addition to covering the cost of service line extensions, Schedule X also allows
4		customers to seek a refund of costs they incur associated with main extensions. The
5		amount of the refund is determined based on the number of additional customers that are
6		added to the same main extension within a 3-year period. If many new customers are
7		added in short succession (e.g., for a master planned housing development), then a
8		substantial portion of the main extension costs would likely be subsidized for the
9		developer.
10		B. Revenue impact of line extensions in this case and on an ongoing basis
11	Q.	Considering both the allowances for new service line extensions and the refunds for
11 12	Q.	Considering both the allowances for new service line extensions and the refunds for main extensions, who ultimately pays for these subsidies?
	<b>Q.</b> A.	
12	-	main extensions, who ultimately pays for these subsidies?
12 13	-	main extensions, who ultimately pays for these subsidies? Ultimately, the cost of these subsidies are borne by all NW Natural customers as they are
12 13 14	-	<ul><li>main extensions, who ultimately pays for these subsidies?</li><li>Ultimately, the cost of these subsidies are borne by all NW Natural customers as they are incorporated into the retail rates charged by the Company to recover its capital</li></ul>
12 13 14 15	-	<ul><li>main extensions, who ultimately pays for these subsidies?</li><li>Ultimately, the cost of these subsidies are borne by all NW Natural customers as they are incorporated into the retail rates charged by the Company to recover its capital expenditures for expanding the gas distribution system. Thus, a portion of the increase in</li></ul>
12 13 14 15 16	-	<ul> <li>main extensions, who ultimately pays for these subsidies?</li> <li>Ultimately, the cost of these subsidies are borne by all NW Natural customers as they are incorporated into the retail rates charged by the Company to recover its capital expenditures for expanding the gas distribution system. Thus, a portion of the increase in revenue that NW Natural is requesting in this case can be attributed to line extension</li> </ul>
12 13 14 15 16 17	-	main extensions, who ultimately pays for these subsidies? Ultimately, the cost of these subsidies are borne by all NW Natural customers as they are incorporated into the retail rates charged by the Company to recover its capital expenditures for expanding the gas distribution system. Thus, a portion of the increase in revenue that NW Natural is requesting in this case can be attributed to line extension subsidies it has provided in the past. In the absence of Schedule X, these line extension

## Q. What is the total magnitude of costs NWN incurs each year to subsidize new service line extensions?

A. NW Natural's response to Coalition DR 100 (Exhibit Coalition/210) included the
following table summarizing the allowances provided to Oregon customers under
Schedule X in 2021.

Table 1. Summary of NW Natural line extension allowances provided through Schedule X in 2021

TYPE	COUNT	ALLOWANCE	ALLOWANCE/CUST
RESIDENTIAL	6,914	\$19,548,925	\$2,827
COMMERCIAL	255	\$5,448,340	\$21,366
INDUSTRIAL	5	\$792,005	\$158,401
TOTAL	7,174	\$25,789,270	\$3,595

6 As the table illustrates, NW Natural is providing nearly \$26 million per year in Schedule 7 X allowances, which constitutes a significant share of the Company's growth-related 8 distribution system capital investment in 2021. For comparison, NW Natural's response 9 to Coalition DR 91 (Exhibit Coalition/208) shows that the Company incurred \$39.4 10 million in customer growth related capital expenditures in 2021, meaning that the 11 allowances equated to 65% of this total. Meanwhile, new customer contributions 12 defrayed these costs, but only to a very small degree, accounting for about \$1.7 million of 13 the total construction costs in 2021. It is also worth noting that the total allowances 14 provided in 2021 (i.e., \$25.8 million) actually exceeds the growth-related capital 15 expenditures that NW Natural attributed to service lines in that same year (\$19.8 million, 16 according to Coalition DR 91). This means that the allowances provided in 2021 and 17 summarized in the table above may have been applied towards customer growth costs 18 other than service lines themselves, such as Main Extensions, Meters, or Permits.

DIRECT TESTIMONY OF ED BURGESS - 8 UG 435

## Q. How do the average allowances provided in 2021 compare to the tiers included in Schedule X?

3	А.	The average residential allowance was \$2,827, which is extremely close to the highest
4		residential tier offered by NW Natural (i.e., \$2,875 for Category A). This means that the
5		vast majority of new residential customers participating in Schedule X are receiving the
6		maximum allowance and that the lower tier allowances (i.e., Categories B through D) are
7		seldom utilitized. Meanwhile, the allowances provided to new non-residential customers,
8		which are not subject to any limitations under Schedule X, are significantly higher,
9		averaging over \$21,000 per commercial customer and over \$158,000 per industrial
10		customer.
11	Q.	What portion of NW Natural's proposed increase in revenue in this case is
12		attributable to Schedule X related costs?
12 13	A.	attributable to Schedule X related costs? NW Natural was unable to directly answer this question with any specificity when asked
	A.	
13	A.	NW Natural was unable to directly answer this question with any specificity when asked
13 14	A.	NW Natural was unable to directly answer this question with any specificity when asked (see Coalition DR 102, Exhibit Coalition/211). However, assuming the 2021 costs
13 14 15	A.	NW Natural was unable to directly answer this question with any specificity when asked (see Coalition DR 102, Exhibit Coalition/211). However, assuming the 2021 costs discussed above are representative of future years, NW Natural could incur \$51.6 million
13 14 15 16	A.	NW Natural was unable to directly answer this question with any specificity when asked (see Coalition DR 102, Exhibit Coalition/211). However, assuming the 2021 costs discussed above are representative of future years, NW Natural could incur \$51.6 million in allowance costs in 2022 and 2023. I estimate that this could equate to \$4.1 million of
13 14 15 16 17	A.	NW Natural was unable to directly answer this question with any specificity when asked (see Coalition DR 102, Exhibit Coalition/211). However, assuming the 2021 costs discussed above are representative of future years, NW Natural could incur \$51.6 million in allowance costs in 2022 and 2023. I estimate that this could equate to \$4.1 million of the requested \$73.5 million increase in revenue, or about 6% of the total request. <sup>1</sup> Thus,

<sup>&</sup>lt;sup>1</sup> Assumes an 8% capital recovery factor applied to the \$51.6 million investment (based on a 6.9% rate of return and 30-year amortization period).

1	Q.	Did NW Natural propose any changes to Schedule X in this case?
2	А.	No. To my knowledge, changes to Schedule X are not addressed in the Company's
3		application.
4	Q.	Did the OPUC's final order in NW Natural's 2011-2012 rate case provide any
5		guidance on future changes to Schedule X?
6	А.	According to the stipulation approved in Order 12-408, "The Parties agree[d] to engage
7		in collaborative discussions regarding the appropriate design of charges for extensions of
8		service to residential customers."
9	Q.	Do you know if any subsequent "collaborative discussions" were held?
10	А.	I do not know one way or the other. However, if they did occur, it is not apparent from
11		NW Natural's application in this case since there is no discussion of what the appropriate
12		charges should be, and no change has been proposed.
13		C. History of line extension policies in Oregon
14	Q.	Does NW Natural's practice of granting allowances for new service line extensions
15		adhere to the ratemaking principle of cost causation?
16	А.	No. In the case of a newly connecting customer, under the principle of cost causation,
17		100% of the new service line costs incurred would be attributable to that customer as the
18		"cost causer." If gas system costs were assigned purely based on the principle of cost
19		causation or "beneficiary pays," there would be no need to provide any allowances, and
20		likely no need for a Schedule X. Under such a hypothetical scenario, 100% of the costs
21		would be assigned to that new customer. This direct assignment of costs is not
22		uncommon when performing cost allocation, especially when new distribution facilities
23		are built solely to serve a single customer.

DIRECT TESTIMONY OF ED BURGESS - 10 UG 435

1	Q.	Why does the practice of granting line extension allowances exist in the first place?
2	A.	Line extension allowances are a fairly common practice among utilities across many
3		jurisdictions. In fact, many utility commissions around the country (including OPUC)
4		have policies that were established in previous decades regarding the use of line
5		extension allowances. These policies were generally seen as an attempt to balance the
6		fundamental principle of cost causation with other important policy goals explained in
7		Section 4 of my testimony below. However, the landscape of policy goals has shifted
8		significantly since those initial line extension policies were adopted, and some
9		Commissions have recently begun to reexamine those line extension policies. For
10		example, in 2021 the Washington UTC concluded a statewide investigation that resulted
11		in a revised approach to calculating gas line extension allowances. <sup>2</sup> This caused the
12		allowance value for one utility (Avista) to be reduced from \$4,678 to \$2,143. <sup>3</sup> In
13		California, the Public Utilities Commission recently released a Staff report
14		recommending an end to all new gas connection subsidies. <sup>4</sup>
15	Q.	When did Oregon adopt its current rules regarding line extensions?
16	A.	In 2001, the OPUC issued Order No. 01-1024 which modified Oregon Administrative
17		Rule 860-021-0050, so that "Each gas utility shall develop, with the Commission's
18		approval, a uniform policy governing the amount of service extension that will be made
19		free to connect a new customer."

<sup>&</sup>lt;sup>2</sup> WUTC Docket Number 210729

 <sup>&</sup>lt;sup>3</sup> <u>https://apiproxy.utc.wa.gov/cases/GetDocument?docID=70&year=</u>
 <u>2021&docketNumber=210729</u>
 <sup>4</sup> <u>https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M423/K516/423516230.PDF</u>

1	Q.	Was there significant debate around this policy change in 2001?
2	А.	No. According to the Order, "No written comments were filed and no request was made
3		for a public hearing as a result of the [N]otice [of Proposed Rulemaking]."
4	Q.	Do you think this rule change would have been similarly non-controversial if
5		proposed today?
6	A.	Not at all. A lot has changed since 2001, and I'm sure many stakeholders would now
7		have strong opinions on the pros and cons of subsidizing new customer growth on the gas
8		system. For example, in recent comments submitted to Oregon's "Future of Gas"
9		proceeding, several stakeholders proposed eliminating line extension allowances. <sup>5</sup>
10	Q.	Did the OPUC Staff's recent Draft Report in the Future of Gas proceeding identify
11		line extension allowances as a potential area for near term reforms?
12	A.	Yes. The Draft Staff Report (Coalition/204/Burgess/28) issued on April 15, 2022,
13		included the following recommendation:
14 15 16 17 18 19		PUC Rates, Finance, and Audit (RFA) staff and Oregon Department of Justice are to explore with gas and electric utilities an interim, easily implemented approach to line extension allowance policy in future upcoming gas and electric rate case dockets that reflects the benefits, costs, and risks associated with system growth or improvements relative to the state's policies on decarbonization.
20	4.	<u>Reconsidering Line Extension Allowances/Subsidies In An Evolving Gas Industry</u>
21		A. Traditional rationales for line extension allowances/subsidies
22	Q.	Can you explain some of the typical rationales used to support line extension policies
23		in prior decades?
24	A.	Yes. There are a few potential reasons that I'm aware of, and I will describe each below.

 $<sup>^5</sup>$  UM 2178, the "Natural Gas Fact-finding Investigation."

1	<i>i.</i> Access to home heating
2	For a subset of customers, providing a free line extension allowance may be an important
3	step to ensure that those customers are able to access a fuel source for home heating that
4	has historically been relatively affordable. In recent years, this rationale has become less
5	applicable due to increasing gas prices as well as advances in the availability and
6	affordability of alternative home heating options such as air source heat pumps.
7	ii. Historical environmental benefits
8	In the past, gas has been viewed as having environmental benefits, especially when
9	compared to other sources of heating fuel such as oil or wood. In recent years, this
10	rationale has become less compelling due to advances in the availability and affordability
11	of alternative home heating options such as air source heat pumps and increased home
12	weatherization/insulation.
13	iii. Downward rate pressure
14	Encouraging customer growth and subsequently increasing sales can put downward
15	pressure on rates for all customers by spreading the fixed cost of the distribution system
16	over a larger customer base. However, this is only true once the initial investment in the
17	line extension has been recouped. Notably, in NW Natural's case, the estimated payback
18	period for most line extensions allowances is up to 30 years. <sup>6</sup> This means that any
19	potential financial benefits conferred to other customers would not materialize until 30
20	years after the line extension allowance is granted. In many ways, this is the core
21	economic rationale for providing line extension subsidies, and I will address it in much

<sup>6</sup> See Exhibit Coalition/213, NWN Response to CUB DR 52.

1		iv. Redundancy of heating fuels
2		In the event of a large-scale winter power outage, gas fuel may be able to provide to
3		provide a secure source of heat when electricity is unavailable. However, it also must be
4		noted that many types of gas heating equipment have electric starters and would be
5		similarly unavailable should an electrical power outage occur.
6		B. Factors supporting a lower level of allowances/subsidies
7	Q.	Can you explain the countervailing factors that should limit allowances for line
8		extensions?
9		<i>i.</i> Cost to other customers
10	A.	Yes. The primary factor historically considered in determining allowance values is the
11		cost to other customers. Subsidizing line extensions shifts fixed costs to other customers
12		in violation of the cost causation principle. As mentioned, NW Natural estimates that the
13		margin sales needed to recoup the initial allowance costs are as long as 30 years in some
14		cases. This means that that existing customers could experience increased costs for 30
15		years after the line extension subsidies are provided until they "break even" relative to a
16		scenario where the allowance is not granted.
17	Q.	Are there other factors that have more recently come to light that might support a
18		reduction of NW Natural's current line extension allowances?
19	A.	Yes, there are several other factors to consider:
20		<i>ii.</i> Increased cost and volatility of gas prices
21		The supply of gas and associated commodity prices were low and relatively stable in the
22		2012 timeframe when NW Natural's line extensions allowances were last updated.
23		However, in the last few years, gas prices have both increased and experienced
24		substantial volatility. This means that the fuel is less affordable and that customers newly
	DIRI UG 4	ECT TESTIMONY OF ED BURGESS - 14 35 Earthjustice 810 Third Ave. Suite 6. Seattle, WA 98104

installing gas appliances may be exposed to more price risk than they have in the past.

The chart below demonstrates this rise in gas commodity prices for the NW Sumas

NW Sumas Spot Natural Gas Index 7 6 5 \$/MMBtu 4 3 2 1 0 Oct Dec Feb Apr Jun Aug Apr Jun Aug Oct Dec Feb Oct Dec Feb Apr Jun Aug Apr Qtr2 Qtr3 Qtr4 Qtr1 Qtr2 Qtr3 Qtr4 Qtr1 Qtr2 Qtr3 Qtr4 Qtr1 Qtr2 2019 2020 2021 2022

trading hub, which is a benchmark for gas prices in the Pacific Northwest.

Figure 2. Natural Gas Commodity Prices in the Pacific Northwest (Data Source: S&P Global Market Intelligence)

4

1

2

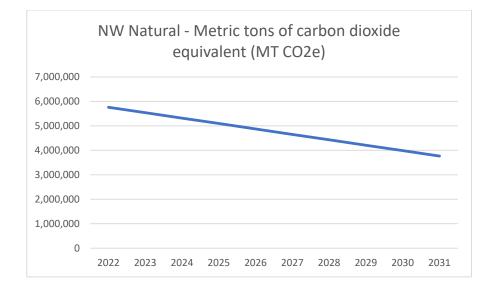
3

iii. Stranded cost risk

5 Many state PUC's, including Oregon's, have recently engaged in investigations to better 6 understand and plan for the future of the gas industry (*see* UM 2178, the "Natural Gas 7 Fact-finding Investigation"). Among the topics generally discussed in these forums is the 8 potential for stranded cost risk in a future that includes widespread electrification. While 9 the future of the gas industry is uncertain, any incremental investment in the gas 10 distribution system carries this risk and could exacerbate stranded costs, including service 11 line extensions.

DIRECT TESTIMONY OF ED BURGESS - 15 UG 435

1	iv. Greenhouse Gas Emissions and Climate Policy
2	Oregon has recently enacted ambitious policies to significantly reduce greenhouse gas
3	emissions across many sectors of its economy, including use of gas. Chief among these is
4	the Climate Protection Program being administered by Oregon DEQ, which sets a
5	declining cap on greenhouse gas emissions for each of Oregon's gas distribution
6	companies, including NW Natural, starting in 2022. The trajectory of this decline for the
7	next decade is shown below:



8 In fact, NW Natural's assumed trajectory of customer growth and gas distribution system 9 expansion contrasts starkly with its obligations to reduce emissions under the Climate 10 Protection Program (CPP). For instance, the CPP compliance instruments distributed to 11 NW Natural are slated to *decline* at a rate of about 4% per year. Meanwhile, according to 12 NWN/Exhibit 1303, the company expects total gas sales to *increase* from 701 million 13 therms in 2021 to 735 million therms in 2023, which equates to approximately a 5% total 14 increase, or an increase of about 2.5% per year. NW Natural projects this increase, 14 DIRECT TESTIMONY OF ED BURGESS - 16 *Earthiustice* 

UG 435

1		despite usage per customer declining in recent years. This suggests that the projected
2		increase in therms consumed is largely attributable to the projected growth in number of
3		customers. In fact, NW Natural projects a 3.8% increase in customer growth from
4		December 2021 to October 2023. <sup>7</sup> This corresponds to a >2% annual increase, which is
5		generally consistent with the annual increase in therms I just mentioned.
6	Q.	How does the contrast between Oregon's climate policies and NW Natural's
7		projected growth in customers (and corresponding gas consumption) relate to line
8		extensions allowances?
9	A.	To the extent that NW Natural's line extension allowances encourage new utility
10		customers to install gas appliances and therefore increase overall gas consumption, those
11		allowances are at cross purposes to Oregon's climate policy.
12		
13		I recognize that NW Natural has announced long-term plans to transition towards
14		renewable natural gas (RNG), which it alleges will help the Company meet its
15		compliance obligations under the CPP. I am somewhat skeptical of the feasibility of this
16		solution and refer the Commission to the Testimony of Nora Anter for a more detailed
17		analysis of the viability of RNG. However, even if this solution were to be successful at
18		some point in the future, any near-term growth in the gas distribution system that is
19		exacerbated by new customer additions may still cause the Company's near-term
20		emissions to increase. This could jeopardize NW Natural's ability to meet the
21		requirements of the CPP cap.

<sup>7</sup> Based on NW Natural Response to Coalition DR 99, Exhibit Coalition/209.

1	v. Availability/affordability of alternatives
2	Recent studies have shown that electrification has become increasingly cost competitive
3	when compared to gas. For example, a recent Rocky Mountain Institute report compared
4	the net present costs of "a new all-electric home versus a new mixed-fuel home that relies
5	on gas for cooking, space heating, and water heating" in several major cities across the
6	country, including the Pacific Northwest. The study found that all-electric homes were
7	the cheaper option in every instance.8 Below is a summary of the study's findings for
8	Seattle, which should be broadly applicable in the Pacific Northwest.

RMI analyzed the costs of a new all-electric home versus a new mixed-fuel home that relies on gas for cooking, space heating, and water heating. In Seattle, the all-electric home saves \$4,300 in net present costs and 28 tons of CO<sub>2</sub> emissions over a 15-year period.



Figure 3. Excerpt from "The New Economics of Electrifying Buildings: An Analysis of Seven Cities," Rocky Mountain Institute (RMI) (2020) showing analysis for Seattle, WA.

9

#### vi. Indoor air quality

- 10 While there are a variety of factors that influence indoor air quality, with ventilation
- 11 being a chief factor, there is a body of research suggesting that homes with gas appliances

<sup>&</sup>lt;sup>8</sup> Claire McKenna, Amar Shah, and Leah Louis-Prescott, "The New Economics of Electrifying Buildings: An Analysis of Seven Cities," Rocky Mountain Institute (RMI) (2020). Report for "All Cities" available at <u>https://rmi.org/insight/the-new-economics-of-electrifying-buildings</u>. Exhibit Coalition/203.

1		can experience elevated levels of nitrogen dioxide and carbon monoxide. <sup>9</sup> It is becoming
2		increasingly clear that there may be public health and safety benefits from encouraging
3		customers to adopt appliances that do not rely on gas combustion.
4		vii. Land use and sprawl
5		While it is likely a small consideration relative to other factors, granting free allowances
6		for a portion of line extension costs may encourage developers to favor designs for homes
7		and businesses that are spaced further apart with a greater number of individual line
8		extensions. This could contribute to inefficient land use and urban sprawl relative to
9		designs that rely more heavily on shared infrastructure and compact design. This could
10		ultimately lead to increases in car travel, impermeable surfaces, and removal of natural
11		habitats.
12	Q.	On balance, when considering all of these factors, do you think that NW Natural's
13		line extension allowance should be modified?
14	A.	Yes. On balance, I think these factors weigh toward a reduction in the allowances that
15		NW Natural offers. The table below provides a summary view of the factors that I
16		discussed above and demonstrates how a significant number of more recent concerns (in
17		italics) have emerged that shift this balance.

<sup>&</sup>lt;sup>9</sup> <u>https://coeh.ph.ucla.edu/effects-of-residential-gas-appliances-on-indoor-and-outdoor-air-quality-and-public-health-in-california/</u>.

Factors Supporting <u>Higher</u>	Factors Supporting <u>Lower</u>
Allowances/Refunds for Gas	Allowances/Refunds for Gas
Service/Main Extensions	Service/Main Extensions
Increases access to a heating	Subsidizing line extensions
fuel that was historically	unfairly shifts costs to other
cheaper than some traditional	customers (violates cost
alternatives (e.g., propane).	causation principle)
Gas is less polluting than	Recent increases and volatility
some traditional alternatives	in gas commodity prices
(e.g., wood, oil)	
Customer growth can put	Concerns regarding stranded
downward pressure on rates	cost risk of the gas system
by spreading fixed costs over	
a larger customer base	
Redundancy of heating fuels	Incentivizing installation of gas
in event of an outage	appliances increases near-term
	and long-term CO2 emissions
	Increased affordability and
	availability of viable
	alternatives (e.g., heat pumps)
	Concerns regarding inefficient
	land use and urban sprawl
	Concerns regarding indoor air
	quality

#### 1 Q. Have other independent entities advocated for similar reforms of line extension

#### 2 allowances?

- 3 A. Yes. A recent report by the Rocky Mountain Institute included a recommendation to "end
- 4 or reform gas line extension allowances."<sup>10</sup>

#### 5 5. <u>The Core Economic Rationale Underpinning Gas Line Extension Subsidies Is</u>

- 6 <u>Flawed</u>
- 7 **A. Scr**

Scrutiny of the economic rationale for line extension subsidies

<sup>&</sup>lt;sup>10</sup> <u>https://rmi.org/insight/its-time-to-rethink-subsidized-gas-line-extensions/</u>. Exhibit Coalition/205.

1	Q.	What is the core rationale that NW Natural, and other gas utilities, generally rely	
2		upon to justify gas line extension allowances?	
3	A.	Of the reasons I listed above in Section 4-A, the core rationale which typically forms the	
4		basis for computing the actual allowance values themselves is generally the economic	
5		benefits delivered to other customers (i.e., "Downward Rate Pressure").	
6	Q.	Do you think this core rationale holds up under closer scrutiny?	
7	A.	No. The basic premise of this reasoning is that the initial investment made by NW	
8		Natural (in the form of an allowance) unlocks incremental new revenues that provide	
9		economic benefits to all customers since those incremental revenues contribute towards	
10		the utility's fixed cost revenue requirements thus putting downward pressure on rates.	
11		However, I believe this fundamental premise is largely incorrect.	
12	Q.	Why do you think this fundamental premise is incorrect?	
13	A.	It is incorrect because there is no evidence that new service line costs are a major	
14		economic barrier to new customers connecting to the gas system. Setting aside low-	
15		income customers for now, it is unclear to me that most new customers would simply	
16		choose not to connect if it weren't for the line extension subsidy. For example, according	
17		to NW Natural's response to Coalition DRs 24 and 100, (Exhibits Coalition/206 and	
18		Coalition/210) there were 9,589 residential customers who newly connected to NW	
19		Natural's system in 2021, but only 6,914 who received a Schedule X allowance. This	
20		means that at least 27% of new customers had no problem covering the service line	
21		extension costs, even though they did not receive a subsidy under Schedule X. Moreover,	
22		as Coalition DR 24 shows, some residential service line extension costs in 2021 were as	
23		high as \$40,517. Even if this customer received the maximum allowance of \$2,875, they	

DIRECT TESTIMONY OF ED BURGESS - 21 UG 435

1		still would have had to pay a customer contribution of over \$37,000 and yet decided to
2		connect anyways. In such instances, it is not clear that the existence of a relatively small
3		allowance is a determining factor for unlocking new customer revenue. It is more likely
4		there are much more significant factors that go into the new customer's decision-making
5		process. In fact, the presence of an allowance in this case more likely represents a form of
6		"free ridership."
7	Q.	Can you elaborate on what you mean by free ridership in this context and why it is
8		problematic?
9	А.	Yes. By free ridership, I mean that a large share of newly interconnecting customers are
10		likely receiving a windfall benefit from the line extension allowance even though it has
11		little to no influence on the customers' decision to connect or the purported economic
12		benefits this would bring to the system. Since the allowance has no bearing on the
13		customer's decision, all it accomplishes is to shift a portion of the line extension costs
14		from the new customer to the utility's rate base and its existing customers. From a basic
15		fairness standpoint, if a customer is sufficiently motivated to install new gas appliances, it
16		is only fair that the customer should pay the cost for the new line extension, rather than
17		passing those costs onto other customers.
18		B. NW Natural's Line Extension Calculations
19	Q.	Can you illustrate how the core economic rationale is also flawed in the context of
20		NW Natural's analysis underpinning its Schedule X allowance values?
21	A.	Yes. NW Natural's analysis underpinning the allowance values was included as a
22		workbook attached in response to CUB DR 52 (Exhibit Coalition/213). The workbook
23		appears to demonstrate that an allowance of approximately \$2,900 will produce a 6.9%

DIRECT TESTIMONY OF ED BURGESS - 22 UG 435

1		rate of return (a target rate NW Natural selected) as an economic benefit to the utility and
2		in turn its customers, assuming a 30-year investment period. <sup>11</sup> This is due to the
3		incremental customer revenues shown on Line 1 of the "Financials" tab, which provide a
4		revenue stream that recoups the initial cost of the allowance plus a return. However, as I
5		explained above, this incremental new revenue stream could very well materialize even
6		with a much lower allowance value. That is, the customer may decide to connect due to a
7		variety of other factors regardless of the allowance being offered. If this were the case,
8		then a lower allowance value would provide an even greater benefit to NW Natural
9		customers. As an example, using that same workbook from the CUB DR 52 Response, I
10		lowered the allowance value from \$2,900 to \$290, which increased the rate of return (i.e.,
11		the economic benefit to NW Natural customers) from 6.9% to 68.7%. <sup>12</sup> Extending this
12		analysis to its logical conclusion, the greatest benefit to NW Natural customers would
13		occur with an allowance value of \$0.
14	Q.	Even if the core economic rational were correct (i.e., that line extension subsidies
15		meaningfully increase revenues), do you think there are other problems with NW
16		Natural's analysis?
17	A.	Yes. In particular I am concerned with NW Natural's assumptions regarding the
18		investment period.

<sup>&</sup>lt;sup>11</sup> This is roughly consistent with NW Natural's current approach for its Category A allowance (i.e., space heating) in Schedule X, which offers an allowance of \$2875. As NW Natural explained, the final allowances are slightly lower than those initially filed based on this workbook.

<sup>&</sup>lt;sup>12</sup> For clarification, this is not to suggest that NW Natural should be authorized a 68.7% return on investment in general, but is simply meant to illustrate the increased financial return it would obtain relative to the initial allowance "investment." This higher return could in theory be used to offset a greater share of future revenue requirement increases.

Q.	Do you think a 30-year or 15-year investment period is appropriate for the line
	extension costs NW Natural is incurring on behalf of its Oregon customers?
A.	No. I think both are excessively long. For comparison, Washington's recent revision to its
	line extension policy reduced the investment period to 7 years. Another utility in
	Minnesota (CenterPoint) uses a 6-year time horizon. As mentioned earlier, a lengthy 30-
	year investment period means that NW Natural customers effectively see no financial
	upside from their collective "investment" in line extension subsidies for at least 30 years
	(when compared to an alternative investment with the same target rate of return). Exhibit
	Coalition/213, NWN Response to CUB DR 52. Additionally, as I noted earlier, virtually
	all of the allowances provided to residential customers under Schedule X correspond to
	Category A, which relies upon a 30-year investment period.
Q.	What are the implications of NW Natural's assumptions for customer revenue in its
	analysis for the line extension allowances?
A.	If the customer revenue assumption is inflated relative to what is likely to occur, then
	NW Natural's analysis would lead to an inappropriately high allowance value. This is
	because it would take much longer to recoup the costs of the investment and also provide
	a sufficient return to exceed the 6.9% target rate.
Q.	Do you have concerns that lead you to believe the revenue assumption could be
	inflated?
A.	Yes. First, it is not clear to me if the revenues presented in NW Natural's analysis reflect
	total revenues or just margin revenues. Presumably the commodity sales are excluded
	since they are irrelevant in this context and the analysis just includes margin revenues.
	Additionally, it is worth noting that this analysis was conducted about decade ago and
	А. <b>Q.</b> <b>Q.</b>

DIRECT TESTIMONY OF ED BURGESS - 24 UG 435

1		does not factor in important changes that have occurred since then that could influence
2		future estimates of margin sales. For instance, this analysis would not factor in the
3		reduced consumption that is likely occurring due to higher gas commodity prices.
4		Additionally, it would not factor in any potential increase in commodity costs due to
5		Oregon's Climate Protection Program which was launched last year. Furthermore, it does
6		not account for increased efficiency of gas appliances over time, or conversion to electric
7		appliances, both of which would likely have some effect within a 30-year timeframe. All
8		of these factors would tend to decrease revenues per customer over time and could
9		ultimately lead to an allowance value closer to \$0.
10	Q.	Do you think there are some customers that might find the line extension costs to be
11		a hardship if the allowance value were set at \$0?
11 12	A.	a hardship if the allowance value were set at \$0? Possibly, although non-gas options are increasingly affordable for low-income customers
	A.	-
12	A.	Possibly, although non-gas options are increasingly affordable for low-income customers
12 13	A.	Possibly, although non-gas options are increasingly affordable for low-income customers and non-gas options avoid the risk of leaving low-income customers on a system with
12 13 14	A.	Possibly, although non-gas options are increasingly affordable for low-income customers and non-gas options avoid the risk of leaving low-income customers on a system with declining use and increasing rates. Even if a non-zero allowance for eligible low-income
12 13 14 15	A.	Possibly, although non-gas options are increasingly affordable for low-income customers and non-gas options avoid the risk of leaving low-income customers on a system with declining use and increasing rates. Even if a non-zero allowance for eligible low-income customers were considered, I think such allowances would be rarely used since low-
12 13 14 15 16	A.	Possibly, although non-gas options are increasingly affordable for low-income customers and non-gas options avoid the risk of leaving low-income customers on a system with declining use and increasing rates. Even if a non-zero allowance for eligible low-income customers were considered, I think such allowances would be rarely used since low- income customers are much more likely to be renters and would not be making
12 13 14 15 16 17	A.	Possibly, although non-gas options are increasingly affordable for low-income customers and non-gas options avoid the risk of leaving low-income customers on a system with declining use and increasing rates. Even if a non-zero allowance for eligible low-income customers were considered, I think such allowances would be rarely used since low- income customers are much more likely to be renters and would not be making investment decisions for a newly constructed home (e.g., service line extensions).

	-	
2		alternatives to new gas connections, at least in part due to higher service line costs
3		under a \$0 allowance scenario?
4	A.	Possibly. I could envision a \$0 allowance being a contributing factor towards some new
5		customers opting for electric appliances instead of gas. In fact, this outcome may also be
6		desirable since it would be highly consistent with the state's overall climate and
7		greenhouse gas policy goals, as well as the other benefits I articulated in the previous
8		section. I acknowledge that these benefits might come with a tradeoff. However, I am not
9		convinced that a modest and frankly uncertain reduction in rates 30 years from now
10		is sufficient justification to forego the other benefits I describe here. Finally, it is worth
11		noting that a continuation of allowances presumes that gas commodity prices will
12		stabilize to a more affordable level than they are today. If that stabilization does not
13		occur, then it may actually be in new customers' best interest to further reduce this
14		allowance as a means to steer customers towards more affordable heating alternatives
15		such as air source heat pumps and increased building envelope efficiency (e.g., through
16		insulation and weatherization).
17	Q.	Do gas utilities like NW Natural have a financial incentive to provide an allowance?
18	A.	Yes. Utilities have a financial incentive to provide an allowance because it effectively
19		expands their ownership of the gas distribution system, by adding a greater share of the
20		service line costs to the utility's rate base. As mentioned earlier, for 2021 this amounted
21		to over \$25 million per year in new capital investment upon which NW Natural can earn
22		a rate of return.
22		

Aside from low-income customers, could there be other new customers who seek

23

1

Q.

1 C. Recommendations

2	Q.	Based on the discussion in this section of your testimony, do you have any
3		recommendations for the Commission?
4	A.	Yes. My primary recommendation in this case is for the Commission to order NW
5		Natural to reduce its line extension allowances to \$0, following the example of other
6		states like California. This should apply to both residential and non-residential customers.
7		Removing incentives for gas appliance additions would also be consistent with Oregon's
8		climate policies and NW Natural's compliance obligations under the Climate Protection
9		Plan.
10	Q.	Do you have any alternative recommendations?
11	A.	If the Commission is not inclined to reduce the allowance value to \$0 as I have
12		recommended, then at a bare minimum the allowance calculation should be modified to
13		reflect more reasonable assumptions (i.e., payback period of less than 30 years;
14		Washington set its investment period at 7 years, for example). I would be happy to
15		elaborate on these improvements if desired.
16	6.	Summary Of Conclusions/Recommendations To The Commission In This Case
17	Q.	Can you please summarize the key findings of your testimony?
18	A.	Yes, my findings are summarized below.
19		A. Findings
20	1.	Oregon's rules regarding line extensions allowances were adopted over 20 years ago,
21		and NW Natural's allowances have not been updated in a decade.
22	2.	Line extension allowances likely account for over 65% of NW Natural's distribution
23		system investments for new customer growth, and 6% of the Company's requested rate
24		increase in this case.

DIRECT TESTIMONY OF ED BURGESS - 27 UG 435

1	3.	Significant new concerns have emerged in recent years that suggest the rules and
2		practices for line extensions be revisited. Some of these concerns include the following:
3		a. Increased cost and volatility of gas prices
4		b. Stranded cost risk
5		c. Greenhouse gas emissions and climate policy
6		d. Availability and affordability of gas alternatives
7		e. Indoor air quality
8		f. Land use and sprawl
9	4.	The core economic rationale for continued line extension allowances is largely
10		unsupported and likely results in windfall subsidies to new gas customers.
11	5.	Even if the core economic rationale were accepted, there are significant errors in NW
12		Natural's calculation of appropriate line extension allowances.
13	Q.	Can you please summarize your recommendations to the Commission?
		<b>T</b> 7 <b>1</b> .1 <b>1 1</b>
14	A.	Yes, my recommendations are summarized below.
14 15	А.	Yes, my recommendations are summarized below.         B.       Recommendations
	A. 1.	
15		B. Recommendations
15 16	1.	<b>B. Recommendations</b> Reduce line extension allowances to \$0 going forward.
15 16 17	1.	<ul> <li><i>B. Recommendations</i></li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum,</li> </ul>
15 16 17 18	1. 2.	<ul> <li><i>B. Recommendations</i></li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum, a limitation on allowances for non-residential customers should be established.</li> </ul>
15 16 17 18 19	1. 2.	<ul> <li>B. Recommendations</li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum, a limitation on allowances for non-residential customers should be established.</li> <li>In the alternative to a \$0 allowance, specific improvements to the allowance calculation</li> </ul>
15 16 17 18 19 20	1. 2.	<ul> <li>B. Recommendations</li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum, a limitation on allowances for non-residential customers should be established.</li> <li>In the alternative to a \$0 allowance, specific improvements to the allowance calculation should be implemented, such as a reduced investment period (i.e., less than 15-30</li> </ul>
15 16 17 18 19 20 21	1. 2. 3.	<ul> <li><i>B.</i> Recommendations</li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum, a limitation on allowances for non-residential customers should be established.</li> <li>In the alternative to a \$0 allowance, specific improvements to the allowance calculation should be implemented, such as a reduced investment period (i.e., less than 15-30 years).</li> </ul>
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	1. 2. 3.	<ul> <li>B. Recommendations</li> <li>Reduce line extension allowances to \$0 going forward.</li> <li>Apply this limitation to both residential and non-residential customers. At a minimum,</li> <li>a limitation on allowances for non-residential customers should be established.</li> <li>In the alternative to a \$0 allowance, specific improvements to the allowance calculation</li> <li>should be implemented, such as a reduced investment period (i.e., less than 15-30</li> <li>years).</li> <li>A statewide investigation should be launched to examine how appropriate line</li> </ul>

COM/CR6/nd3

**PROPOSED DECISION** 

Agenda ID #20848 (Rev.1) Quasi-Legislative 9/15/2022 Item #33

# Decision PROPOSED DECISION OF COMMISSIONER RECHTSCHAFFEN (Mailed 8/8/2022)

## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Building Decarbonization.

Rulemaking 19-01-011

#### PHASE III DECISION ELIMINATING GAS LINE EXTENSION ALLOWANCES, TEN-YEAR REFUNDABLE PAYMENT OPTION, AND FIFTY PERCENT DISCOUNT PAYMENT OPTION UNDER GAS LINE EXTENSION RULES

# TABLE OF CONTENTS

# Title

PH	ASE 1	III DECI	ISION ELIMINATING GAS LINE EXTENSION	
AL	LOW	ANCES	, TEN-YEAR REFUNDABLE PAYMENT OPTION, AND	
FIF	TY PI	ERCEN	T DISCOUNT PAYMENT OPTION UNDER GAS LINE	
EX	TENS	ION RU	JLES	1
Sur	nmar	y		2
1.	Proc	edural l	Background	2
	1.1.	Senate	Bill (SB) 1477	2
	1.2.	Phase	Ι	3
	1.3.	Phase	Π	4
	1.4.	Phase	III	4
2.	Issue	es Befor	e the Commission	8
3.	Gas	Line Su	bsidies	8
	3.1.	Histor	y of Gas Line Subsidies	8
	3.2.	Line E	xtension Costs and Subsidies	11
		3.2.1.	Allowances	12
		3.2.2.	Refunds	13
		3.2.3.	Discounts	14
		3.2.4.	Total Subsidies	14
4.	Ener	gy Divi	sion Staff Proposal	16
	4.1.		s Gas Consumption and GHG Emissions	
	4.2.	Result	s in Ratepayer Savings	17
	4.3.	Places	the Financial Responsibility on the Initiating Party	19
	4.4.	Incent	ivizes New All-Electric Construction	20
	4.5.	Provid	les Certainty to Builder Community for Future Projects	
		and Pl	anning	20
	4.6.		ally Impacts Property Prices	
5.	Resi	dential	Gas Line Subsidies Revisions	22
	5.1.	Positic	ons of Parties Supporting the Staff Proposal	22
	5.2.	Positic	ons of Parties Opposing the Staff Proposal	25
	5.3.	Discus	sion	26
		5.3.1.	Elimination of Gas Line Subsidies for Residential	
			Customers: Approved	26
		5.3.2.	Elimination of Gas Line Subsidies for Residential	
			Customers Through a Phased Approach: Denied	35
		5.3.3.	Continued Coordination/ Consultation with Other State	
			Agencies: Approved	38

		5.3.4.	Delay Decision Until the Conclusion of the Long-Term	
			Gas System Planning Rulemaking (R.20-01-007): Denied	40
6.	Non	-Reside	ntial Gas Line Subsidies Revisions	41
	6.1.	Positic	ons of Parties Supporting the Staff Proposal	41
	6.2.	Positic	ons of Parties Opposing the Staff Proposal	42
	6.3.		ate Proposals	
		6.3.1.	Exemptions for Specific List of Projects that Provide	
			Environmental or Financial Benefits (Joint IOUs)	43
		6.3.2.		
			and CNG Use (Clean Energy)	44
		6.3.3.		
			Environmental or Financial Benefits (Joint Parties and	
			TURN)	45
		6.3.4.		
			(SBUA)	46
	6.4.	Discus	sion	47
		6.4.1.	Elimination of Non-Residential Gas Line Subsidies:	
			Approved	47
		6.4.2.	Exemptions for Specific List of Projects that Provide	
			Environmental or Financial Benefits: Denied	48
		6.4.3.	Exemptions for Projects That Enable Hydrogen, RNG	
			and CNG Use: Denied	52
		6.4.4.	Application Process for Select Projects that Provide	
			Environmental or Financial Benefits: Approved with	
			Modifications	56
		6.4.5.	Assistance for Low Income, Rural and Small Businesses:	
			Approved with Modifications	58
7.	Com	pliance	with Pub. Util. Code Section 783(b)-(d)	59
	7.1.	Staff P	roposal	60
	7.2.	Positic	ons of Parties Supporting the Staff Proposal	63
	7.3.	Positic	ons of Parties Opposing the Staff Proposal	64
	7.4.	Discus	sion	65
		7.4.1.	Compliance with Pub. Util. Code Section 783(b)	65
		7.4.2.	Compliance with Pub. Util. Code Section 783(c)	72
		7.4.3.	Compliance with Pub. Util. Code Section 783(d)	72
8.	Cond	clusion.		72
9.	Com	ments o	on Proposed Decision	73
10.	Assi	gnment	of Proceeding	74
Fin	dings	of Fact	-	74

Conclusions of Law	.80
ORDER	.81

#### Tables

- Table 1.
   Current Residential Gas Line Extension Allowances
- Table 2. 2017-2026 Historical and Forecasted Total Gas Line Subsidies
- Table 3. Estimated Annual Savings to Gas Ratepayers from EliminatingResidential Gas Line Subsidies
- Table 4.Estimated Annual Savings to Gas Ratepayers from Eliminating<br/>Non-Residential Gas Line Subsidies
- Table 5. Average Subsidies Paid to Non-Residential Projects in 2021
- Table 6. Commission Approved Subsidies for Alternate Fuels

## PHASE III DECISION ELIMINATING GAS LINE EXTENSION ALLOWANCES, TEN-YEAR REFUNDABLE PAYMENT OPTION, AND FIFTY PERCENT DISCOUNT PAYMENT OPTION UNDER GAS LINE EXTENSION RULES

#### Summary

This decision adopts Energy Division's staff proposal to eliminate gas line extension allowances, the 10-year refundable payment option, and the 50 percent discount payment option provided under the current gas line extension rules. The elimination is for all customers in all customer classes effective July 1, 2023. This decision applies to new applications for gas line extensions submitted on or after July 1, 2023. Applications submitted before July 1, 2023 will not be affected by this decision.

These changes move the state closer to meeting its goals of reducing greenhouse gas (GHG)<sup>1</sup> emissions and combating climate change. The result will not only be significant reductions in GHG emissions but also improved quality of life and health for customers, hundreds of millions of dollars in ratepayer savings annually, greater equity for low-income customers, and greater certainty for builders, developers, and individual customers. This decision meets the statutory requirements as set forth in Public Utilities Code Section 783(b)-(d).

This proceeding remains open.

### 1. Procedural Background

### 1.1. Senate Bill (SB) 1477

On September 13, 2018, Governor Jerry Brown signed into law SB 1477 (Stern, 2018).<sup>2</sup> SB 1477 promotes California's building-related greenhouse gas (GHG) emission reduction goals, and makes available \$50 million annually for

<sup>&</sup>lt;sup>1</sup> *See* Appendix A for a list of abbreviations, acronyms, and definitions used in this decision. <sup>2</sup> SB 1477 was codified as Public Utilities (Pub. Util.) Code Section 748.6, Section 910.4, and Sections 921-922.

four years,<sup>3</sup> for a total of \$200 million, dedicated towards two building electrification pilot programs. The funds are derived from the revenue generated from the GHG emission allowances directly allocated to gas corporations and consigned to auction as part of the California Air Resources Board's (CARB)

Cap-and-Trade program.<sup>4</sup>

On January 31, 2019, in response to the passage of SB 1477, the California Public Utilities Commission (Commission) initiated this rulemaking to support the decarbonization of buildings in California. The proceeding is:

designed to be inclusive of any alternatives that could lead to the reduction of greenhouse gas emissions associated with energy use in buildings [related]... to the State's goals of reducing economy-wide GHG emissions 40% below 1990 levels by 2030 and achieving carbon neutrality by 2045 or sooner.<sup>5</sup>

## 1.2. Phase I

On May 17, 2019, the assigned Commissioner issued a Scoping Memo and Ruling setting forth the issues to be considered in Phase I of the proceeding (Phase I Scoping Memo). The Phase I Scoping Memo was amended on July 16, 2019 to include additional issues. Phase I was resolved in Decision (D.) 20-03-027, which established the two building decarbonization pilot programs required by SB 1477: the Building Initiative for Low-Emissions

<sup>&</sup>lt;sup>3</sup> Fiscal Year (FY) 2019-2020 to FY 2022-23.

<sup>&</sup>lt;sup>4</sup> Four gas corporations currently participate in California's Cap-and-Trade program: Southern California Gas Company (SoCalGas), Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southwest Gas Corporation (SWG).

<sup>&</sup>lt;sup>5</sup> Order Instituting Rulemaking (OIR) 19-01-011 at 2.

Development (BUILD) Program and the Technology and Equipment for Clean Heating (TECH) Initiative.<sup>6</sup>

## 1.3. Phase II

On August 25, 2020, the assigned Commissioner issued an Amended Scoping Memo and Ruling setting forth the issues to be considered in Phase II of this proceeding and included an associated Energy Division Staff Proposal. Phase II was resolved in D.21-11-002, which: (1) adopted guiding principles for the layering of incentives when multiple programs fund the same equipment; (2) established a new Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) program to provide financial incentives to help victims of wildfires and natural disasters rebuild all-electric properties; (3) provided guidance on data sharing; and (4) directed California's three large electric investor-owned utilities (IOUs)<sup>7</sup> to each study energy bill impacts that result from switching from gas water heaters to electric heat pump water heaters, and to propose a rate adjustment in a new Rate Design Window application if their study reflected a net energy bill increase. D.21-11-002 also directed the IOUs to collect data on fuels used to power various appliances, including propane.

### 1.4. Phase III

On November 16, 2021, the assigned Commissioner issued an Amended Scoping Memo and Ruling setting forth the issues to be considered in Phase III of this proceeding (Phase III Scoping Memo). Appended to the Phase III Scoping Memo were an Energy Division Staff Proposal (Phase III Staff Proposal or Staff Proposal) and a list of questions to be addressed by respondents and parties. Specifically, Phase III considers eliminating gas line extension allowances

<sup>&</sup>lt;sup>6</sup> See D.20-03-027 at 7.

<sup>&</sup>lt;sup>7</sup> Southern California Edison Company (SCE), PG&E, and SDG&E.

(allowances), the 10-year refundable payment option (refunds), and the 50 percent discount payment option (discounts) (collectively, gas line subsidies) provided under the current gas line extension rules (gas rules).<sup>8</sup>

The Phase III Scoping Memo set a schedule for the filing and service of comments and reply comments on the Staff Proposal. It also required that comments and reply comments be verified.<sup>9</sup> Verification enables the creation of a robust and reliable record, and allows the Commission to find facts based on those pleadings. It also set a deadline by which parties could file a motion to request evidentiary hearings to cross-examine parties on disputed issues of material fact stated in comments or reply comments, or to seek leave to serve prepared testimony, which in turn might be subject to cross-examination.

Lastly, in compliance with Pub. Util. Code Section 783(c),<sup>10</sup> the Phase III Scoping Memo requested assistance and input from the following state agencies

(https://www.pge.com/tariffs/assets/pdf/tariffbook/GAS\_RULES\_15.pdf, https://www.pge.com/tariffs/assets/pdf/tariffbook/GAS\_RULES\_16.pdf), SDG&E (https://tariff.sdge.com/tm2/pdf/GAS\_GAS-RULES\_GRULE15.pdf, https://tariff.sdge.com/tm2/pdf/GAS\_GAS-RULES\_GRULE16.pdf), and SWG (https://www.swgas.com/1409184638489/rule15.pdf, https://www.swgas.com/1409184638517/RULE\_16--GRC\_Eff-April-1-2021.pdf), and Cas Rules 20 21 for SoCalCas (https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf

<sup>&</sup>lt;sup>8</sup> Gas Rules 15-16 for PG&E

Gas Rules 20-21 for SoCalGas (<u>https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf</u>, <u>https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/21.pdf</u>). Rule 15/20 pertains to gas distribution main extensions and Rule 16/21 pertains to gas service line extensions.

<sup>&</sup>lt;sup>9</sup> *See* Rule 1.11 and Rule 18.1. Verification requires that the person filing the pleading knows that the statements in the document are true, except for matters which are stated on information or belief, and as to those matters requires that the person believes them to be true. Moreover, it requires that the person declare under penalty of perjury that the foregoing is true and correct. The Phase III Scoping Memo stated that unverified comments and reply comments would only be given the weight of argument.

<sup>&</sup>lt;sup>10</sup> Pub. Util. Code Section 783(c) states: "The commission shall request the assistance of appropriate state agencies and departments in conducting any investigation or proceeding pursuant to subdivision (b), including, but not limited to, the Transportation Agency, the *Footnote continued on next page.* 

and departments: the California State Transportation Agency; the California Department of Food and Agriculture; the California Department of Consumer Affairs (DCA); the California Department of Real Estate (DRE); and the California Department of Housing and Community Development (HCD).<sup>11</sup> On November 17, 2021, the assigned Commissioner sent a follow up e-mail to the Executive Directors (or an equivalent position) of these agencies and departments and invited them to provide input on the Staff Proposal by December 20, 2021.

Verified comments and verified reply comments on the Staff Proposal were filed on December 20, 2021, and January 10, 2022, respectively, by 18 parties: PG&E, SDG&E, and SoCalGas (collectively, the Joint IOUs); SCE; SWG; the Public Advocates Office of the California Public Utilities Commission (Cal Advocates); Clean Energy; Coalition of California Utility Employees (CCUE); California Environmental Justice Alliance (CEJA), Environmental Defense Fund (EDF), Natural Resources Defense Council (NRDC), and Sierra Club (collectively, the Joint Parties); East Bay Community Energy (EBCE), Marin Clean Energy (MCE), Sonoma Clean Power (SCP), and Peninsula Clean Energy (PCE) (collectively, the Joint CCAs); The Utility Reform Network (TURN); and Small Business Utility Advocates (SBUA).<sup>12</sup> No comments or responses from the state agencies and state departments were received.

Department of Food and Agriculture, the Department of Consumer Affairs, the Bureau of Real Estate, and the Department of Housing and Community Development."

<sup>&</sup>lt;sup>11</sup> Phase III Scoping Memo at 1 and 12.

<sup>&</sup>lt;sup>12</sup> The parties filed individual pleadings in several instances and are cited as such in this order. The exception is when they filed jointly and are cited herein as Joint IOUs, Joint Parties, or Joint CCAs.

On January 28, 2022, the assigned Administrative Law Judges (ALJs) issued a ruling seeking clarifications and additional information to assist the Commission in resolving the Phase III issues. On February 21, 2022, comments were filed by Cal Advocates, Clean Energy, SBUA, the Joint Parties, PG&E, SWG, SDG&E and SoCalGas.

On March 22, 2022, the assigned ALJs issued a ruling revising the remaining proceeding schedule and addressing other procedural matters. Specifically, the ruling informed parties of a March 14, 2022, Energy Division data request (ED-DR) sent to PG&E, SoCalGas, SDG&E and SWG; directed the gas utilities to verify and serve their responses to the ED-DR on all parties; provided an opportunity for parties to comment on the gas utilities' responses to the ED-DR; and updated the schedule for the remainder of the proceeding. On April 4, 2022, the gas utilities verified and served their responses to the ED-DR. On April 18, 2022, the assigned ALJs issued a ruling receiving into the evidentiary record the gas utilities' responses to the ED-DR (April 18, 2022 ALJ Ruling).

No motion was made for evidentiary hearing. No evidentiary hearing was held.

On May 4, 2022, opening briefs were filed and served by PG&E, SoCalGas, SDG&E, Cal Advocates, Clean Energy, the Joint Parties, TURN, and SBUA. On May 18, 2022, reply briefs were filed and served by PG&E, SoCalGas, SDG&E, Clean Energy, the Joint Parties, TURN, and SBUA. The record is the Staff Proposal; comments and reply comments; the gas IOUs' responses to the ED-DR; and parties' briefs. Phase III was submitted for decision on May 18, 2022 (upon receipt of reply briefs).

- 7 -

## 2. Issues Before the Commission

The Phase III Scoping Memo identified the following issues to be resolved:<sup>13</sup>

- A. Whether the Commission should modify or eliminate gas line extension allowances for some or all customer classes (residential and non-residential);
- B. Whether the Commission should modify or eliminate gas line extension refunds for some or all customer classes (residential and non-residential); and
- C. Whether the Commission should modify or eliminate gas line extension discounts for some or all customer classes (residential and non-residential).

This decision addresses all the issues identified in the Phase III Scoping Memo and concludes Phase III of the proceeding. The proceeding remains open to consider additional building decarbonization issues in future phases.

### 3. Gas Line Subsidies

# 3.1. History of Gas Line Subsidies

The history of the gas rules in California dates back more than a century. With Commission decisions beginning in 1915 and continuing to today, California's gas IOUs have an obligation to provide prospective new customers the opportunity to receive utility service via a line extension based on a uniform set of rules. Under current rules, gas IOUs are not obligated to extend gas lines free of cost but must provide the opportunity for customers to be connected to the utility system at reasonable prices, terms, and conditions.

In general, applicants for new service must pay the full cost of the line extension and interconnection but are provided offsets for part of the cost. These offsets, or subsidies, were reasonable when utilities were in a declining cost

<sup>&</sup>lt;sup>13</sup> Phase III Scoping Memo at 3-5.

industry, in which the addition of more customers led to reductions in the utility's costs and rates, thereby benefiting both old and new customers.

Conditions in the 1970s led the Commission to reconsider these gas line subsidies. These conditions included severe economic and energy challenges such as oil and natural gas embargos, shortages, and significant price increases; increasing cost and environmental concerns from the continued use, and new development of conventional thermal electric generating resources (including oil, gas, coal, and nuclear); inflation; economic stagnation; and repeated gas and electric utility cost and rate increases. In 1974, the Legislature requested that the Commission investigate electric rate structures and consider alternatives that would discourage, rather than encourage, increased energy consumption.

In 1977, the Commission opened an investigation to reconsider line extension rules given these fundamental changes.<sup>14</sup> Among the considerations was whether existing allowances for extensions of gas and electric service should be modified or abolished. Several decisions followed.

In D.91328, the Commission decided to abolish gas and electric line allowances, terminate refunds, and provide incentives for conservation.<sup>15</sup> On rehearing, the Commission decided to phase out line extension allowances over about five years, and established June 1, 1983, for the filing of utility tariffs to begin the phase-out.<sup>16</sup>

The legislature responded to the Commission's decisions ending and phasing out line extension allowances by passing an urgency bill to add

<sup>&</sup>lt;sup>14</sup> Case 10260.

<sup>&</sup>lt;sup>15</sup> D.91328, February 13, 1980.

<sup>&</sup>lt;sup>16</sup> D.82-04-068, April 1982 and D.82-12-094, December 1982.

Pub. Util. Code Section 783.<sup>17</sup> The new law requires that the Commission continue the line extension rules that were in place on January 1, 1982, and not make any changes (with limited exceptions) unless the Commission made findings on each of seven issues set out in Pub. Util. Code Section 783. Shortly thereafter, the Commission rescinded all prior orders and closed its investigation into line extension rules.<sup>18</sup>

Further consideration of modifying or eliminating gas line subsidies is governed by Pub. Util. Code Section 783(b), which states that whenever the Commission:

...institutes an investigation into the terms and conditions for the extension of services provided by gas and electrical corporations to new or existing customers, or considers issuing an order or decision amending those terms or conditions, the commission shall make written findings on all of the following [seven] issues.

In summary, the seven issues include an examination of the economic and other effects of line and service extension modifications upon residential and non-residential customers (*e.g.*, agricultural, commercial, industrial), locally funded governmental or district projects, redevelopment projects, existing ratepayers, energy consumption, and energy conservation.

Pub. Util. Code Section 783(c) requires that:

The commission shall request the assistance of appropriate state agencies and departments in conducting any investigation or proceeding pursuant to subdivision (b), including, but not limited to, the Transportation Agency, the Department of Food and Agriculture, the Department of

<sup>&</sup>lt;sup>17</sup> SB 48; Stats. 1983, Ch. 1229, Sec. 2, effective September 30, 1983.

<sup>&</sup>lt;sup>18</sup> D.83-09-066, D.84-04-047.

Consumer Affairs, the Bureau of Real Estate, and the Department of Housing and Community Development. Lastly, Pub. Util. Code Section 783(d) requires that:

Any new order or decision issued pursuant to an investigation or proceeding conducted pursuant to subdivision (b) shall become effective on July 1 of the year which follows the year when the new order or decision is adopted by the commission, so as to ensure that the public has at least six months to consider the new order or decision.<sup>19</sup>

This ensures that the public has at least six months to consider the new order or decision.

# 3.2. Line Extension Costs and Subsidies

Under current gas rules, the total cost of a gas line extension for an entity (*e.g.*, builder, developer, individual customer) who seeks connection to the utility system (applicant) is paid by the applicant at project commencement. The total project cost is divided into two parts: non-refundable and refundable.<sup>20</sup> Both the non-refundable and refundable parts are paid by the applicant, but the refundable costs are offset or subsidized by all other ratepayers. Refundable costs are first subsidized by "allowances." Refundable costs in excess of allowances, if any, are returned to an applicant via either: (1) refunds over 10 years; or

<sup>19</sup> See

https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?sectionNum=783&lawCo de=PUC.

<sup>&</sup>lt;sup>20</sup> Both "refundable" costs and "non-refundable" costs are specified in Section D.6 of Gas Rule 15 for PG&E, SDG&E, and SWG and Gas Rule 20 for SoCalGas. Per Section D.6.a of Gas Rule 15/20, refundable costs include the total estimated installed cost, including taxes, to complete the distribution line extension. Per Section D.6.c of Gas Rule 15/20, non-refundable costs include the estimated value of all substructures and other protective structures. Section E.5 of Gas Rule 16 for PG&E, SDG&E, and SWG, and Gas Rule 21 for SoCalGas specifies that service line extensions are not eligible for refund.

(2) a one-time 50 percent discount at the option of the applicant. These three gas line subsidies are further described below.

## 3.2.1. Allowances

For residential customers, allowances are fixed amounts awarded by appliance per residential unit. Each gas utility has different allowance levels. The table below has the current allowances.

SWG<sup>24</sup> Northern California / Southern **PG&E**<sup>21</sup> **SCG**<sup>22</sup> SDG&E<sup>23</sup> California South Lake Tahoe Item Water \$1,391 \$1,138 \$643 \$183 \$231 Heating \$862 Space \$987 \$987 \$698 \$674 Heating Oven/Range \$84 \$201 \$114 \$69 \$28 Dryer Stub \$24 \$289 \$160 \$115 \$70 Space NA NA \$1,098 \$1,765 NA Cooling

**Table 1.**Current Residential Gas Line Extension Allowances<br/>(Per Meter or Residential Dwelling Unit, on a per unit basis)

For non-residential customers, allowances are provided by a formula that is calculated on a site-specific basis taking into consideration usage, demand, and

<sup>&</sup>lt;sup>21</sup> PG&E rates effective January 1, 2022

<sup>(</sup>https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS\_4488-G.pdf).

<sup>&</sup>lt;sup>22</sup> SCG Rule 20 Gas Rules approved in 2022 (https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf).

<sup>&</sup>lt;sup>23</sup> SDG&E rates approved in 2020 (<u>https://tariff.sdge.com/tm2/pdf/2866-G.pdf</u>).

<sup>&</sup>lt;sup>24</sup> SWG rates are bifurcated into their two non-contiguous territories (https://www.swgas.com/1409184638489/rule15.pdf).

other factors. The allowance value is equal to "net revenue"<sup>25</sup> divided by "cost of service factor."<sup>26</sup>

In 2021, three of the four California large gas IOUs spent over \$104 million on allowances (\$81 million on residential allowances and \$23 million on non-residential allowances).<sup>27</sup> We note that this amount does not include SDG&E's allowance expenditures.<sup>28</sup> Therefore, if SDG&E's allowance expenditures were to be included, the total amount would be higher.

#### 3.2.2. Refunds

Under the refund option, the gas IOU returns remaining refundable costs (*i.e.*, those that remain after application of allowances) to the applicant over the course of 10 years. Adjustments are made if further development occurs, and new customers are added that utilize the same newly constructed segment of the gas distribution line to fairly allocate common costs.

In 2021, California's four large gas IOUs spent approximately \$2.9 million on refunds (\$1.5 million in residential refunds and \$1.4 million in non-residential refunds).<sup>29</sup> We note that this amount does not include all of SDG&E's refunds

<sup>&</sup>lt;sup>25</sup> "Net revenue" is a projection of how much additional revenue a gas IOU is expected to net annually as a result of a new customer using gas.

<sup>&</sup>lt;sup>26</sup> "Cost of service factor" is a figure that represents the annual cost of servicing one dollar's worth of capital investment for which ratepayers must pay.

<sup>&</sup>lt;sup>27</sup> The three IOUs are PG&E, SoCalGas, and SWG. The data does not include SDG&E's allowances because SDG&E says that information is not available due to the limitation of SDG&E's project management system. (April 18, 2022 ALJ Ruling, Attachment 3 and Attachment 5.)

<sup>&</sup>lt;sup>28</sup> SDG&E did not provide data on allowances to the Commission. In explanation, SDG&E says its project management system does not facilitate data extraction of allowances granted or discounts provided. (*See* April 18, 2022 ALJ Ruling, Attachment 3 at 1.)

<sup>&</sup>lt;sup>29</sup> April 18, 2022 ALJ Ruling, Attachment 5.

expenditures.<sup>30</sup> Therefore, if all of SDG&E's refund expenditures were to be included, the total amount would likely be higher.

# 3.2.3. Discounts

The discount payment option is an alternative to the refund option. If the applicant selects the discount option over the refund option, they receive a one-time 50 percent discount on the refundable costs that remain after application of available allowances. The discount is received at the time payments are due and the applicant does not need to wait for refunds over several years.

In 2021, three of four California large gas IOUs spent approximately \$23.4 million on discounts (\$17.7 million in residential discounts, and \$5.7 million in non-residential discounts).<sup>31</sup> We note that this amount does not include SDG&E's discount expenditures.<sup>32</sup> Therefore, if SDG&E's discount expenditures were to be included, the total amount would be higher.

# 3.2.4. Total Subsidies

Over the last five years (2017 to 2021), California's four gas IOUs (with partial data for SDG&E) spent approximately \$622 million (approximately \$124 million annually) on gas line subsidies, including allowances, refunds and

<sup>&</sup>lt;sup>30</sup> SDG&E refund data includes residential and commercial, but not other non-residential (*e.g.*, industrial, agricultural). (April 18, 2022 ALJ Ruling, Attachment 3 at 1.)

<sup>&</sup>lt;sup>31</sup> The data does not include SDG&E's discounts because the information is not available due to the limitation of SDG&E's project management system. (*See* April 18, 2022 ALJ Ruling, Attachment 3 and Attachment 5.)

<sup>&</sup>lt;sup>32</sup> SDG&E did not provide data on discounts to the Commission. In explanation, SDG&E says its project management system does not facilitate data extraction of allowances granted or discounts provided." (*See* April 18, 2022 ALJ Ruling, Attachment 3 at 1.)

discounts.<sup>33</sup> Over the next five years (2022 to 2026) if gas line subsidies continue, the gas IOUs (with partial data for SDG&E) anticipate they will spend approximately \$819 million (approximately \$164 million annually) on gas line subsidies.<sup>34</sup> The gas IOUs' data shows that this totals more than \$1.4 billion over the 10-year period from 2017-2026 (about \$144 million annually). The table below provides each of the gas IOUs' historical (2017-2021) and forecasted total gas line subsidies (2022-2026).<sup>35</sup>

Table 2.2017-2026 Historical and Forecasted Total Gas Line Subsidies<br/>(\$ million)<sup>36</sup>

IOUs	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total (2017–2026)
PG&E	\$44	\$57	\$75	\$88	\$69	\$101	\$106	\$105	\$101	\$97	\$843
SoCalGas	\$48	\$55	\$51	\$51	\$57	\$57	\$57	\$58	\$58	\$58	\$550
SDG&E <sup>37</sup>	\$1	\$2	\$2	\$2	\$1	\$1	\$1	\$1	\$1	\$1	\$13
SWG	\$4	\$3	\$7	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$35
Total	\$97	\$117	\$135	\$143	\$130	\$162	\$168	\$167	\$163	\$160	\$1,441

Once the gas line extensions are built, the gas IOUs own and operate the facilities as a part of their systems. The IOUs recover the expended gas line subsidies as capital costs through their ratebase, subject to depreciation and rates of return over the depreciable life (*e.g.*, 30 years) of the line extensions. As a

<sup>&</sup>lt;sup>33</sup> The total amount includes SDG&E's amounts for refunds but not for allowances and discounts because the information is not available due to the limitation of SDG&E's project management system. (*See* April 18, 2022 ALJ Ruling, Attachment 3 and Attachment 5.)

<sup>&</sup>lt;sup>34</sup> April 18, 2022 ALJ Ruling, Attachment 5.

<sup>&</sup>lt;sup>35</sup> Id.

<sup>&</sup>lt;sup>36</sup> Id.

<sup>&</sup>lt;sup>37</sup> Only partial data for SDG&E.

result, the total amounts paid by ratepayers (revenue requirements) associated with the 2017-2026 total gas line subsidies would be well above the \$1.4 billion.

#### 4. Energy Division Staff Proposal

The Staff Proposal recommends eliminating the gas line subsidies for all customer classes. Staff argues that California's gas line subsidies are designed to encourage gas usage, as affirmed in both D.89177 and D.91328, and that by allowing builders to receive a separate allowance for each approved appliance type, builders are incentivized to install more gas appliances in order to defray more costs. Those gas appliances, in turn, perpetuate reliance on gas service and lock in all associated GHG emissions for the life of the appliance, which averages 10 to 20 years for a gas water heater and 18 years for a gas furnace unless the appliance is retired early and replaced with an electric alternative. Additionally, a key strategy to reach carbon neutrality by 2045 is to phase out gas usage in the building sector. Any new gas infrastructure is likely to become a stranded asset. The maintenance and operational costs associated with gas infrastructure will need to be paid for by a shrinking number of future gas customers, which will be reflected in higher rates. These customers are likely to be low-income customers as they face the greatest barriers to electrification, including affordability challenges presented by the upfront costs of electrification. As such, the provision of gas line allowances makes it harder to meet California's GHG reduction goals while increasing the future cost of gas service for customers that are unwilling or unable to switch from gas to electric service.<sup>38</sup> The Staff Proposal provides further details on the following benefits in support of eliminating gas line subsidies for all customer classes.

<sup>&</sup>lt;sup>38</sup> Staff Proposal. (See Phase III Scoping Memo, Appendix A at 24-25.)

## 4.1. Lowers Gas Consumption and GHG Emissions

The Staff Proposal states that since these subsidies promote the increased and continued use of gas, they perpetuate reliance on gas service and lock in all associated GHG emissions for the life of the appliance unless the appliance is retired early and replaced with an electric alternative. Staff argues that the elimination of these subsidies would result in less gas consumption, more electricity consumption, fewer GHG emissions and less air pollution.<sup>39</sup>

#### 4.2. Results in Ratepayer Savings

According to data submitted by the gas IOUs, and served in response to the March 22, 2022 Assigned ALJs' Ruling, the total amount of subsidies provided across all four gas IOU territories (partial data for SDG&E)<sup>40</sup> in 2021 was approximately \$130 million. The IOUs project this to increase in coming years, peaking at \$168 million in 2023.<sup>41</sup> Because of data deficiencies from SDG&E, these reported aggregated numbers are undoubtedly lower than the actual subsidies being paid. Additionally, the Staff Proposal states that if a new dual fuel building were to be constructed without gas line subsidies, gas ratepayers would save even more as a result of an additional customer sharing in costs necessary to maintain the common carrier pipeline network, so eliminating the line extension subsidies would save ratepayers hundreds of millions of dollars. Although it is noted that these savings could be used for a multitude of useful purposes, the Staff Proposal does not at this time make any

<sup>&</sup>lt;sup>39</sup> Staff Proposal. (See Phase III Scoping Memo, Appendix A at 35, 40, and 44.)

<sup>&</sup>lt;sup>40</sup> The total amount excludes SDG&E's amounts for allowances and discounts because the information is not available due to the limitation of SDG&E's project management system. (*See* April 18, 2022 ALJ Ruling, Attachment 3 and Attachment 5.)

<sup>&</sup>lt;sup>41</sup> April 18, 2022 ALJ Ruling, Attachment 2 and Attachment 5 at 2.

recommendations on diverting funds for other purposes, but instead highlights that cost savings make other investments possible without causing upward rate pressure.<sup>42</sup> Eliminating gas line subsidies for all new constructions would result in the following estimated minimum savings below.

**Table 3.** Estimated Annual Savings to Gas Ratepayers from Eliminating<br/>Residential Gas Line Subsidies (\$ million)

Gas Line Subsidies	<b>2021 Expenditure</b> s <sup>43</sup>					Estimated Annual Savings <sup>44</sup> (Average of Forecast 2024-2026)				
	PG&E	SoCalGas	SDG&E	SWG	Total	PG&E	SoCalGas	SDG&E	SWG	Total
Allowances	\$39	\$40	Did not provide	\$2	\$81	\$47	\$41	Did not provide	\$2	\$90
Refunds	\$0.4	\$0.1	\$1	\$.07	\$1.57	\$.5	\$0	\$1	\$0	\$1.5
Discounts	\$15	\$2	Did not provide	\$0.5	\$17.5	\$18	\$2	Did not provide	\$0	\$20
Total	\$54.4	\$42	\$1	\$2.57	\$100.07	\$65.5	\$42	\$1	\$2	\$110.5

<sup>&</sup>lt;sup>42</sup> Staff Proposal. *See* Phase III Scoping Memo, Appendix A at 46.

<sup>&</sup>lt;sup>43</sup> April 18, 2022 ALJ Ruling, Attachment 5.

<sup>&</sup>lt;sup>44</sup> April 18, 2022 ALJ Ruling, Attachments 1-5. Estimates are averages provided by the IOUs of projected expenditures from 2024 to 2026. Year 2024 is the first full year that this decision would be in effect.

Gas Line Subsidies	2021 Expenditures <sup>45</sup>					Estimated Annual Savings <sup>46</sup> (Average of Forecast 2024-2026)				
	PG&E	SoCalGas	SDG&E	SWG	Total	PG&E	SoCalGas	SDG&E	SWG	Total
Allowances	\$8	\$14	Did not provide	\$1	\$23	\$13	\$14	Did not provide	\$1	\$28
Refunds	\$0.3	\$0	\$047	\$0	\$0.3	\$1	\$0	\$0	\$0	\$1
Discounts	\$6	\$0	Did not provide	\$0	\$6	\$20	\$0	Did not provide	\$0	\$20
Total	\$14.3	\$14	\$0	\$1	\$29.3	\$36	\$14	\$0	\$1	\$49

# **Table 4.**Estimated Annual Savings to Gas Ratepayers from Eliminating<br/>Non-Residential Gas Line Subsidies (\$ million)

#### 4.3. Places the Financial Responsibility on the Initiating Party

The Staff Proposal argues that eliminating gas line subsidies will force builders, or customers, to shoulder a greater portion of the expenses associated with gas line extensions if they choose to construct a building that uses gas or extends gas service on existing properties. That greater expense, in turn, would be passed on at the point of sale for a new building or directly absorbed by the customer for an existing building. This added up-front cost burden would send a signal to builders that building new gas infrastructure is more expensive, and thus make dual fuel new construction less desirable and more costly. As such, the builder community would be more likely to gravitate toward all-electric new construction. The Staff Proposal further notes that property price increases for

<sup>&</sup>lt;sup>45</sup> April 18, 2022 ALJ Ruling, Attachment 5.

<sup>&</sup>lt;sup>46</sup> Estimate based on IOU projections reported to CPUC and served as attachment in the April 18, 2022 ALJ Ruling. Figures are 2024 projections as that is the first full year that this decision would be in effect.

<sup>&</sup>lt;sup>47</sup> Commercial only.

dual fuel new construction would become moot if all new homes and offices are built all-electric.<sup>48</sup>

#### 4.4. Incentivizes New All-Electric Construction

The Staff Proposal argues that eliminating the gas line subsidies for all new construction would increase the number of newly constructed all-electric buildings which will likely cost less than newly constructed dual fuel buildings. Dual fuel buildings constructed without gas line extension allowances would be expected to cost more than they do today, but not by more than approximately 0.25 percent on average.<sup>49</sup> The Staff Proposal also notes that specifically eliminating refunds would remove additional incentives for builders to encourage even more dual fuel construction in the future. Because refund payments are contingent on additional dual fuel buildings being added to a newly constructed gas line extension, builders have a strong interest in adding more dual fuel homes in the vicinity of their dual fuel construction projects. Eliminating refunds removes such considerations and motivations for the builder.<sup>50</sup>

## 4.5. Provides Certainty to Builder Community for Future Projects and Planning

The Staff Proposal states that eliminating refunds has the additional benefit of encouraging a more predictable future for the building industry. California is already on a trajectory toward building decarbonization, which will eventually result in builders receiving less in refund payments as a greater percentage of homes and offices are built all-electric moving forward. Rather

<sup>&</sup>lt;sup>48</sup> Phase III Scoping Memo, Appendix A at 31.

<sup>&</sup>lt;sup>49</sup> Phase III Scoping Memo, Appendix A at 33-34 and 41.

<sup>&</sup>lt;sup>50</sup> Phase III Scoping Memo, Appendix A at 36.

than have builders speculate as to whether they will ever be refunded their full advance payments for building gas infrastructure, eliminating refunds on a set date lets builders know from what point forward their refund payments will stop, thus enabling the builder community to build that knowledge into their project financing considerations and future revenue assumptions.<sup>51</sup>

#### 4.6. Minimally Impacts Property Prices

The Staff Proposal argues that eliminating the gas line subsidies is not expected to lead to a significant rise in average property prices. To the extent that such a policy change leads to more all-electric new construction, those new homes and offices will be less expensive than if they were built dual fuel due to the elimination of any expense associated with installing gas infrastructure (*e.g.*, trenches, pipes, meters). If a builder opts to still build dual fuel, any resulting property price increase should be minimal.<sup>52</sup> If allowances are eliminated, residential property prices would increase between 0.21-0.25 percent.<sup>53</sup> and non-residential property prices would increase by 0.25 percent.<sup>54</sup> If refunds are eliminated, residential and non-residential property prices are estimated to increase by 0.07 percent.<sup>55</sup> If discounts are eliminated, residential and non-residential property prices are estimated to increase by 0.04 percent.<sup>56</sup> The combined effect of eliminating all subsidies (allowances,

<sup>&</sup>lt;sup>51</sup> Phase III Scoping Memo, Appendix A at 37.

<sup>&</sup>lt;sup>52</sup> Phase III Scoping Memo, Appendix A at 31-32.

<sup>&</sup>lt;sup>53</sup> Phase III Scoping Memo, Appendix A at 32-33.

<sup>&</sup>lt;sup>54</sup> Phase III Scoping Memo, Appendix A at 33.

<sup>&</sup>lt;sup>55</sup> Phase III Scoping Memo, Appendix A at 32 and 37-38.

<sup>&</sup>lt;sup>56</sup> Phase III Scoping Memo, Appendix A at 32 and 41-42.

refunds, and discounts) is 0.32-0.36 percent for residential and non-residential

properties.57

#### 5. Residential Gas Line Subsidies Revisions

Of the 18 parties commenting on eliminating the gas line subsidies for residential customers, 16 parties endorse the Staff Proposal (or suggest phased elimination) and two oppose.

## 5.1. Positions of Parties Supporting the Staff Proposal

The 16 parties who endorse the Staff Proposal to eliminate gas line subsidies for the residential sector (or who suggest phased elimination) are: PG&E, SDG&E, SCE, Clean Energy, Cal Advocates, CEJA, EDF, NRDC, Sierra Club, TURN, EBCE, MCE, SCP, PCE, and SBUA. SoCalGas did not oppose the recommendation on residential gas line extension allowances, refunds, and discounts as a policy matter. Parties supporting the Staff Proposal make several points.

- Elimination of the gas line subsidies will discourage construction of gas infrastructure while encouraging more all-electric new construction that together will help reduce GHG emissions and improve air quality consistent with California's decarbonization goals;
- Current gas line subsidies provide incentives to install appliances which largely lock-in that use over the 10 to 20-year life of the appliance, which are likely to become

<sup>&</sup>lt;sup>57</sup> Non-residential property price impacts can be estimated based on the same logic used to estimate residential property price impacts. D.07-07-019 did not make any finding of fact regarding the property price impact associated with the elimination of line extension allowances for non-residential building, but the inputs and assumptions used to determine non-residential allowances (*e.g.*, demand, usage, *etc.*) are largely the same as for residential allowance computations. (Phase III Scoping Memo, Appendix A at 32.)

stranded assets given California's ambitious GHG emissions reduction goals;

- Elimination of gas line subsidies does not prohibit any customer from installing gas appliances in applications that need, or where the customer prefers, to use gas, but it relieves other gas ratepayers from subsidizing the extension for those customers and reduces average gas rates for all gas customers;
- Gas line subsidies originated when interconnecting more customers was thought to lower costs and benefit all; this is no longer the case and the benefits, if any, no longer outweigh the costs of increased GHG emissions and dependence on combustion fuels;
- The elimination of gas line subsidies will save ratepayers hundreds of millions of dollars; support equitable transition from gas to electricity; further California's climate goals; improve air quality and related health outcomes both inside and outside buildings; and provide greater certainty to builders, contractors, and gas distribution workers. Eliminating gas line subsidies is of particular benefit to low-income customers given these financial implications;
- Existing gas line subsidies work against the goals of multiple Commission-authorized building decarbonization programs also funded by ratepayers;
- There will be minimal or no overall negative impacts on workers, with the increased number of jobs in the electric industry being the same or more than the decrease of jobs in the gas industry;
- There will be minimal or no overall negative impacts on low-income customers, as programs such as BUILD, the California Energy Smart Homes Program, and discount rate programs such as the California Alternative Rates for Energy and Family Electric Rate Assistance help mitigate such upfront effects on the affordable housing and low-income sectors. Given their lower rate of new home

purchasing, low-income customers are not typically the ones benefitting from gas line subsidies, yet they contribute towards these subsidies which inequitably increases gas rates for all customers, including low-income customers;

- There will be minimal impacts on property prices, as all-electric new homes are less expensive to build than dual fuel homes. Additionally, programs such as the California Electric Homes Program will provide \$75 million in financial incentives and technical support for the construction of new all-electric residential buildings;
- The Commission should consider changes to gas line extension rules in the broader context of California's climate change policy and consult with other state agencies;
- The Joint IOUs recommend a phased elimination to reduce the immediate negative impacts while still accomplishing the overall objectives in support of California's climate goals. In particular, they state that a phased approach would:<sup>58</sup>
  - Avoid near-term gas rate increases if the proposed changes substantially reduce the number of new connections relative to forecasts used in approved ratemaking proceedings;
  - Allow recognition of the varying schedules for future ratemaking proceedings;
  - Allow time for customers to account for increased project costs; and
  - Allow utilities time to study the impact on their electric load profiles and generation needs.

<sup>&</sup>lt;sup>58</sup> Opening Comments of the Joint IOUs on Phase III Staff Proposal at 9-10.

## 5.2. Positions of Parties Opposing the Staff Proposal

The two parties who oppose the Staff Proposal in their comments are SWG

and CCUE. They make several points in opposition.

- Gas line subsidies allow new customers access to clean, reliable, and affordable fuel (*e.g.*, renewable natural gas, hydrogen) that is poised to contribute significantly to decarbonization efforts;
- Fuel choice should be left to the customer and decisions to reduce GHG emissions should be energy commodity neutral;
- Natural gas systems can decarbonize and play an important role in meeting California's energy objectives;
- Prices for dual fuel homes will increase and prices for all-electric homes will decrease, requiring builders to charge more to offset the loss of the gas line subsidies where natural gas remains in demand (*e.g.*, cold climates);
- Gas rates will increase as fixed costs of the gas system will be spread over a declining customer base, leaving those who cannot afford to electrify or don't have the option to electrify, with higher gas rates;
- Gas industry workers will be negatively impacted, with fewer workers to safely operate and maintain the gas system, safely and properly decommission gas infrastructure, and install new technology, affecting safety and reliability;
- Grid reliability will be negatively impacted as California's supply of gas-fired generation decreases while the need for flexible, fast ramping generation and local reliability remains; and
- A decision in this proceeding should be delayed until Rulemaking (R.) 20-01-007 concludes because both proceedings address similar forward-looking gas infrastructure issues, and delineating the future of natural gas in California is a necessary threshold issue.

### 5.3. Discussion

#### 5.3.1. Elimination of Gas Line Subsidies for Residential Customers: Approved

This decision adopts the staff's proposal to eliminate the residential gas line subsidies effective July 1, 2023. The elimination of subsidies applies to new applications for gas line extensions submitted on or after July 1, 2023, and will not affect applications submitted to the IOUs before July 1, 2023. Within 30 days of the date of this order, the gas IOUs shall each submit a Tier 2 Advice Letter (AL) to revise their respective gas rules to implement this decision.

We make this revision to the gas rules because it is consistent with state objectives and policy framework. It will move the state closer to meeting its goals of reducing GHG emissions and combating climate change. The cumulative ratepayer savings from avoided gas line subsidies over the life of the gas line extensions will be significant.

As noted above, the total amount in rates paid by all ratepayers (*i.e.*, revenue requirements) associated with the 2017-2026 total gas line subsidies will be at least \$1.4 billion. In addition to the significant reductions in GHG emissions and ratepayer savings, these changes will also improve the quality of life and health for customers, provide greater equity for low-income customers, and greater certainty for builders, developers, and individual customers. These benefits are discussed in more detail below.

The Commission also notes the broad support for the Staff Proposal to eliminate the gas line subsidies for the residential sector from a cross-section of parties representing a wide range of interests (*e.g.*, utility, ratepayer, environmental, social justice, community choice aggregators). However, we also address other party concerns in more detail below.

#### 5.3.1.1. Elimination of Residential Gas Line Subsidies Aligns with Overall State Decarbonization Goals

The current gas line subsidies were established during a period when the state's energy needs, and policy goals were very different from today's. They are no longer consistent with today's GHG emission reduction goals, the urgent need to reduce costs and rates, and the long term need to minimize future stranded investment.

The Commission agrees with the Staff Proposal, SCE, Cal Advocates, the Joint Parties, TURN, and the Joint CCAs that the continuation of these subsidies work against today's climate goals and conflicts with SB 32 and SB 1477. As the Staff Proposal correctly points out, current gas line subsidies encourage gas use by providing incentives to builders to install more gas appliances, perpetuating a continued reliance on the gas system both now and over the life of the appliance, and offsetting if not reversing any GHG emission reduction benefits secured through other decarbonization measures.

The Commission also agrees with the Joint Parties that the elimination of the gas line subsidies is essential in complementing the changes made to the 2022 Building Code,<sup>59</sup> which go into effect in 2023.<sup>60</sup> These changes include requiring an electric heat pump space or water heater in standard building design, and electrification readiness (including appropriate electric, space, and plumbing readiness to accommodate a heat pump water heater where not initially installed). The policy would also complement CARB's proposal, laid out in its

<sup>&</sup>lt;sup>59</sup> 2022 Building Efficiency Standards (<u>https://www.energy.ca.gov/programs-and-</u>topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency).

<sup>&</sup>lt;sup>60</sup> Opening Brief of Joint Parties at 7-8.

Draft 2022 State Strategy for the State Implementation Plan,<sup>61</sup> to implement a zero-emissions standard for all new space and water heaters by 2030, citing the "opportunity for substantial emissions reductions where zero-emission technology is available."<sup>62</sup>

5.3.1.2. The Elimination of Residential Gas Line Subsidies Improves Overall Quality of Life (GHG Emissions Reductions, Ratepayer Savings, Benefits to Low Income, Greater Certainty)

The Commission also agrees with the numerous supporting parties that the elimination of these subsidies will result in significant societal and ratepayer benefits. These benefits include GHG emission reductions, with improved health conditions for customers via improved indoor and outdoor air quality, with particularly reduced health risks from the reduction of high GHG emitting appliances inside a home. Low-income customers are most likely to face these health risks given they often have less effective stove ventilation systems.<sup>63</sup>

Other impacts include reducing or eliminating a range of other negative environmental effects including land use impacts, wildlife impacts, and impacts on water use and water quality. Building out the natural gas system can cause erosion of minerals and toxins into nearby streams, contamination of drinking water sources, and high levels of water use.<sup>64</sup>

<sup>&</sup>lt;sup>61</sup>Although still a draft, this proposal indicates the direction state policy is headed. CARB, Draft 2022 State Strategy for the State Implementation Plan at 86 (https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft\_2022\_State\_SIP\_Strategy.pdf).

<sup>&</sup>lt;sup>62</sup> Opening Brief of Joint Parties at 8.

<sup>&</sup>lt;sup>63</sup> Opening Brief of Joint Parties at 8-9.

<sup>&</sup>lt;sup>64</sup> Response of the Joint Parties to the January 28, 2022 Assigned ALJs' Ruling Seeking Clarifications and Additional Information at 5.

The benefits also include hundreds of millions of dollars in utility and ratepayer savings annually and over time. For example, the costs identified by Staff are the costs that the utility must spend each year for construction and installation.<sup>65</sup> Those costs are financed by the utility (*e.g.*, via stocks, bonds, retained earnings) so the funds are available to complete the line extension in the year requested. Those costs are then put into ratebase to be recovered over time (e.g., 30 years) from ratepayers. Thus, the Joint Parties and TURN are correct that the savings identified in the Staff Proposal are understated with respect to the actual cost to ratepayers.<sup>66</sup> The cost is higher since recovery over 30 years costs ratepayers more than would a one-time charge. The elimination of gas line subsidies is one of many steps in furthering the decarbonization of buildings, while easing the burden on residential customers that currently subsidize the new interconnections. This is of particular benefit to low-income customers who face increasing affordability pressures. As the Joint Parties note, the current context perpetuates inequity (*i.e.*, low-income customers are not typically the ones benefitting from gas line subsidies given their lower rate of new home purchasing, yet they contribute towards these subsidies which increase gas rates for all customers).<sup>67</sup>

Additionally, eliminating gas line extension incentives will offer the benefit of greater certainty for the market. This is especially true for the builder community and the contractor community, as noted in the Staff Proposal.

<sup>&</sup>lt;sup>65</sup> The customer pays the entire line extension cost upfront, but that total is offset by the subsidies (allowances, refunds, discounts). The utility must fund the subsidies to get back up to the total line extension cost.

<sup>&</sup>lt;sup>66</sup> Opening Comments of Joint Parties and TURN on Phase III Staff Proposal at 6.

<sup>&</sup>lt;sup>67</sup> Opening Comments of Joint Parties and TURN on Phase III Staff Proposal at 2.

Lastly, eliminating gas line extension allowances is not expected to lead to a significant rise in average property prices per the Staff Proposal. To the extent that such a policy change leads to more all-electric new construction, those new homes and offices will be less expensive than if they were built dual fuel due to the elimination of any expense associated with installing gas infrastructure. On the other hand, construction cost/property prices are likely to increase for those that build dual fuel, necessitating gas line extensions. Data provided in the Staff Proposal, however, shows this increase is limited to about 0.32 percent to 0.36 percent.<sup>68</sup> The Commission agrees that this is a minimal effect on the total cost of a new residential and commercial building. Thus, we find the net benefits from these eliminations to be greater than the additional costs that would be placed on to builders or experienced by owners of new buildings choosing dual-fuel construction.

#### 5.3.1.3. The Elimination of Residential Gas Line Subsidies Benefits Low Income and Vulnerable Communities

Eliminating gas line subsidies will advance equity. This occurs given that low-income customers contribute towards these subsidies through gas rates even though they are typically not the ones applying for, or benefiting from, the gas line subsidies (due to the fact that they are more likely to be renters than homeowners). Equity is advanced by revenue requirements being reduced for

<sup>&</sup>lt;sup>68</sup> Staff Proposal from ruling of November 16, 2021 at 33 (*see* Phase III Scoping Memo, Appendix A). An increase of 0.036 percent is an increase of \$36 for each \$100,000.

everyone, including low-income customers, estimated at approximately \$164 million annually.<sup>69</sup>

We also note the concern with low-income and vulnerable communities not having the means to electrify, and whether or not they will be "left behind" to carry the burden of higher gas rates as other customers leave the gas system. This is at least in part addressed by current programs, including BUILD and California Energy Smart Homes, which help mitigate these effects by offering subsidies and technical assistance to build homes that are all electric and beyond the current building code. BUILD, in particular, is focused on low-income housing.<sup>70</sup>

Lastly, the Commission agrees with the Joint Parties that:

...negative implications for affordable housing developers and low-income home purchasers, in terms of upfront purchasing costs, are very small if nonexistent... at least one study has found that electrification in new construction reduces costs over the lifetime of appliances when compared to new homes built with fossil-fuel burning appliances.<sup>71</sup>

## 5.3.1.4. The Elimination of Residential Gas Line Subsidies Has a Net Positive Impact on Workforce

The Commission acknowledges that as more buildings electrify, there is likely to be a shift in demand for work in both the gas and electric fields. CCUE

<sup>&</sup>lt;sup>69</sup> Over the next five years (2022 to 2026) if gas line subsidies continue, the gas IOUs (with partial data for SDG&E) anticipate they will spend approximately \$819 million (approximately \$164 million annually) on gas line subsidies (April 18, 2022 ALJ Ruling, Attachment 5).

<sup>&</sup>lt;sup>70</sup> Program details about BUILD are available at: <u>https://www.energy.ca.gov/programs-and-topics/programs/building-initiative-low-emissions-development-program</u>. Program details about the California Smart Energy Homes program are available at: <u>https://www.caenergysmarthomes.com</u>.

<sup>&</sup>lt;sup>71</sup> Opening Comments of CEJA, EDF, NRDC, Sierra Club, and TURN at 7

claims there will be a loss of more than 10,000 gas distribution jobs in California due to decarbonization,<sup>72</sup> while SCE claims a net gain of 7,000 full time jobs (12,400 full time electricity generation and distribution jobs offset by 5,400–6,800 fewer full-time gas distribution jobs).<sup>73</sup> The Commission agrees with SCE that there will likely be a net positive impact as we are likely to see an increase in demand for skilled workers in several economic sectors, including in the electric industry, construction jobs for energy efficiency improvements and building retrofits.

Additionally, since Track 2 of the Long-Term Gas Planning OIR, R.20-01-007, will be addressing the issue of ensuring an equitable future that minimizes workforce disruption, CCUE's concerns are best addressed in that proceeding. The Scoping Memo in that proceeding lays out a scope that includes how negative impacts on workforce from building decarbonization can be mitigated, what the costs of these mitigation strategies are, and who should be responsible for paying them, among other questions.<sup>74</sup>

#### 5.3.1.5. The Elimination of Residential Gas Line Subsidies Maintains Customer Choice and Advances Equity

The Commission disagrees with SWG that we are removing customer choice by eliminating the gas line subsidies. We reiterate that customers can continue to select their choice of fuel. The only difference is that existing and

<sup>&</sup>lt;sup>72</sup> Comments of the CCUE on Phase III Staff Proposal at 5.

<sup>&</sup>lt;sup>73</sup> Comments of SCE on Phase III Amended Scoping Memo and Ruling of Assigned Commissioner at 4.

<sup>&</sup>lt;sup>74</sup> OIR to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and perform Long-Term Gas System Planning, Section 2.3.2 at 7 (<u>https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M415/K275/415275138.PDF</u>).

future gas customers will no longer have to subsidize investments in the gas infrastructure for new customers. Requiring the new customers to pay their full costs of gas line extensions only places the responsibility back onto builders or customers to shoulder a greater portion of the expense if they choose to construct a building that uses gas or extend gas service on existing properties. Therefore, this change aligns the cost responsibility with the customer who causes the costs, thereby advances equity for all customers.

#### 5.3.1.6. The Elimination of Residential Gas Line Subsidies Will Not Create a Death Spiral

The Commission disagrees with CCUE that this decision will lead to a "death spiral." We acknowledge that the effect of eliminating gas line extension incentives would be that the cost of constructing a building that uses gas, or extends gas service on existing properties, may increase relative to the status quo. This cost would in turn likely be passed down at the point of sale for a new building or directly absorbed by the customer for an existing building. Neither CCUE nor any other party presents any credible data to show that the gas rates increase will cause the cost of a building to escalate so much that demand for buildings will disproportionately decline, leading to higher gas rates and even less building until the gas utility goes out of business, or some other catastrophic outcome for the gas system. Further, there is no support for the argument that there will be a "death spiral" due to the elimination of gas line extension subsidies that leads to an unreliable and unsafe utility system, as discussed more fully below.

Rather, eliminating gas line extension incentives will send a price signal that building new gas infrastructure is more expensive, thus making dual fuel new construction less desirable and financially riskier. As such, there would be a gravitation toward all-electric new construction, leading to all the benefits described above, helping California meet its decarbonization goals. We conclude that these benefits outweigh any concerns about a hypothetical "death spiral" due to the decisions we make here.

#### 5.3.1.7. The Elimination of Residential Gas Line Subsidies Maintains Gas System Reliability and Safety

CCUE argues that the elimination of the gas line subsidies will lead to fewer gas customers and higher rates, putting the utilities at risk of not having enough revenue to cover the costs to pay workers to maintain the system, which leads to a less safe and less reliable gas system. CCUE states that some of the anticipated impacts include fewer leaks detected and repaired (impacting both safety and the climate), reduced customer response levels at call centers, extended response time from reconnections, longer service outages, deferred reliability maintenance projects, deferred gas pipeline replacements, and slower emergency response times.<sup>75</sup>

CCUE's concerns are misplaced. The Commission disagrees with CCUE that eliminating gas line extension subsidies would adversely impact gas system reliability and safety. The Commission's regulatory and ratemaking process consistently ensures that utilities have sufficient resources to operate and maintain a safe and reliable system, and minimize rate impacts. The utilities' revenue requirement covers worker compensation, essential work including leak detections and leak repairs, appropriate customer response levels at call centers, reasonable response times, minimizing service outages, not deferring projects

<sup>&</sup>lt;sup>75</sup> Comments of CCUE on Phase III Staff Proposal at 3-4.

that are necessary for reliability, not deferring replacements, and maintaining responsible emergency response times. There is no credible evidence that the authorized revenue requirements have been, or will be, inadequate to maintain safe and reliable gas systems. And there is certainly no evidence that utilities will not apply for additional funding as and when necessary. In setting the overall revenue requirement, the Commission does not micromanage how utilities spend their authorized revenue. Utility managements are responsible for allocating the authorized revenue (with limited exceptions) to meet all requirements of the utility system, and apply for additional funding when necessary.

But let there be no misunderstanding, safe and reliable services of the utilities the Commission regulate is our top priority. We disagree that the changes we make in this decision compromises that priority in any manner.

#### 5.3.2. Elimination of Gas Line Subsidies for Residential Customers Through a Phased Approach: Denied

This decision denies the Joint IOUs' proposal to eliminate the gas line subsidies through a phased, or delayed, approach. The Joint IOUs argue that: (1) removing the gas line subsidies too quickly could result in a near-term increase in gas rates if the proposed changes substantially reduce the number of new connections relative to the forecasts within the utilities' approved and ongoing ratemaking proceedings; (2) gas utilities have varying schedules for their ratemaking proceedings so a utility-specific phase-in may be appropriate; (3) customers will have time to account for increased project costs; and (4) utilities will have time to study the impact to its electric load profile and generation needs to ensure the safety and reliability of services.<sup>76</sup> The Joint IOUs recommend a workshop to explore these issues in more detail.

The Commission is not convinced by the Joint IOUs' arguments for a phased approach. Rather, we agree with SCE that we must pursue carbon neutrality with unprecedented urgency and commitment as California is already behind in meeting its 2030 emission reduction targets.<sup>77</sup>

The Joint IOUs do not provide a detailed plan for a phased approach (other than a recommendation to simply delay the elimination of the gas line subsidies). Nonetheless, the Commission considers each of the Joint IOUs' claims with the information we do have but do not find any of them convincing.

The Commission disagrees, for example, that eliminating gas line subsidies now could result in unreasonable near-term rate increases due to a reduction in the number of residential customers. In fact, no credible evidence is presented on what the impact will be on gas rates, let alone that it will be unreasonable. We understand that the change for residential customers due to the policy we adopt today may have an incidental effect on gas rates. We do not, however, foresee that it will be such a significant increase in the near term as to require a phasing in of our policy, particularly given the unprecedented urgency with which we must pursue carbon neutrality. Many variables affect the final determination of the gas rates. The Commission is not convinced that the policy change we adopt today requires special treatment; rather, it can be reasonably addressed when we address all relevant variables in determining gas rates.

<sup>&</sup>lt;sup>76</sup> Opening Comments of the Joint IOUs on Phase III Staff Proposal at 9-10.

<sup>&</sup>lt;sup>77</sup> Comments of SCE on Phase III Amended Scoping Memo and Ruling of Assigned Commissioner at 2.

The Commission disagrees that utilities' varying ratemaking schedules require a utility-specific phase in. No credible evidence is presented that the impact on rates, if any, will be so dramatic that we must account for the timing of various ratemaking proceedings, nor that any effect on rates cannot be addressed within current ratemaking tools.

The Commission also disagrees that customers need more time to adjust. The available evidence is that all electric homes are less costly to construct than dual fuel homes. Customers do not need time to adjust when costs decline. Further, given that the elimination of the gas line subsidies would not take effect until July 1, 2023 (the time required by Pub. Util. Code Section 783(d)), there is already a reasonable amount of time built in for the change, particularly for those customers who still require dual fuel service. Therefore, the Joint IOUs' concerns about sufficient time with regards to the implementation of any changes have already been addressed by statute.

Finally, the Commission disagrees that electric utilities need time to study the impact on load and generation requirements. No credible evidence is presented that the change in the number of residential customers will cause such a dramatic change in the near term as to require delayed implementation in order to study load and generation requirements, particularly with respect to safety and reliability. The changes will be incremental and can be factored into current tools to forecast load and generation requirements to ensure safe and reliable service.

Utilities are obligated to provide safe and reliable service. The Commission adjusts rates so that each utility has the financial resources to do so. Utilities continually consider safety and reliability of their systems and make necessary changes. SCE says, for example, that it continuously evaluates how the grid must

- 37 -

evolve to support California's GHG reduction goals. Each year, SCE reports that it conducts transmission, sub-transmission, and distribution system planning assessments for a 10-year planning horizon that identify the grid needs to accommodate new generation resources, customer load and Distributed Energy Resource growth. SCE says it will continue working with the California Energy Commission (CEC) to develop the building electrification forecast and include it in the Integrated Energy Policy Report load forecast to ensure the reliable and affordable integration of building electrification growth into SCE's annual system planning assessments.<sup>78</sup>

The Commission expects that each electric utility, just like SCE, continuously evaluates how the grid needs evolve to support a wide range of goals, including California's GHG reduction goals.

Based on these considerations, the Joint IOUs' request for additional workshops is unnecessary and denied. We conclude that the elimination of the gas line subsidies for the residential sector effective July 1, 2023 complies with the timelines required under Pub. Util. Code Section 783(d) and should not be further delayed.

#### 5.3.3. Continued Coordination/ Consultation with Other State Agencies: Approved

Cal Advocates recommend that the Commission coordinate with the state agencies that are responsible for the state building code (*e.g.*, the CEC) and that the Commission should "approach GHG reductions broadly and work to promote GHG reduction across all sectors."<sup>79</sup> The Commission agrees with

<sup>&</sup>lt;sup>78</sup> Opening Comments of SCE on Phase III Amended Scoping Memo and Ruling of Assigned Commissioner at 14.

<sup>&</sup>lt;sup>79</sup> Opening Comments of Cal Advocates at 3.

Cal Advocates that coordination is critical. The Commission has and will continue to consult with the CEC and CARB, and other agencies as appropriate, on these issues.

The publications of both CEC and CARB reflect relevant views on eliminating line extensions and building electrification, which we note here. The 2021 Integrated Energy Policy Report, published by the CEC, recommends that the "CPUC should continue to investigate eliminating line extension allowances for new gas hookups."<sup>80</sup> CARB has released its draft 2022 Scoping Plan for Assembly Bill 32 compliance, and dedicates an appendix chapter to building electrification, strongly advocating for electrification as a means to reduce GHGs from the building sector.<sup>81</sup> CARB notes that scaling back natural gas infrastructure is a potential action to support a successful transition to building electrification.<sup>82</sup> CARB further notes that the Staff Proposal to eliminate gas line subsidies "can encourage all-electric new construction and help alleviate future gas rate escalation."<sup>83</sup>

The Commission will continue to work closely with CEC, CARB, and other state agencies on these issues to ensure consistency in our approaches to GHG reductions broadly.

<sup>81</sup> CARB, Draft 2022 Scoping Plan, Appendix F (<u>https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp-appendix-f-building-decarbonization.pdf</u>).

<sup>82</sup> CARB, Draft 2022 Scoping Plan, Appendix F (<u>https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp-appendix-f-building-decarbonization.pdf</u>).

<sup>&</sup>lt;sup>80</sup> CEC, Final 2021 Integrated Energy Policy Report at 182 (https://efiling.energy.ca.gov/GetDocument.aspx?tn=241599).

<sup>&</sup>lt;sup>83</sup> *Id.* at 22-23.

#### 5.3.4. Delay Decision Until the Conclusion of the Long-Term Gas System Planning Rulemaking (R.20-01-007): Denied

SWG recommends that a decision on gas line subsidies be suspended until R.20-01-007 concludes because the relationship between this proceeding and R.20-01-007 requires further analysis, and that "delineating the future of natural gas in California is a necessary threshold issue." They argue that addressing similar forward-looking gas infrastructure issues in separate, concurrent proceedings could result in inconsistent factual findings and policy determinations, potentially causing future confusion and inefficiencies.<sup>84</sup> The Commission disagrees.

R.20-01-007 includes two tracks. The scope of Track 1A includes reliability standards that reflect the current and prospective operational challenges that face gas system operators. Track 1B addresses market structure and regulation. Track 2A addresses the appropriate gas infrastructure for California given the state's GHG reduction laws, addressing gas transmission and distribution infrastructure. Track 2B addresses equity, rate design, and gas revenues, with a particular lens for low-income customers and those residing in disadvantaged communities. Track 2C addresses forecasting and data.<sup>85</sup>

Both R.20-01-007 and this proceeding address issues relating to gas systems; however, the scope of this decision is narrowly focused on the elimination of the gas line subsidies. Our decision on this limited issue here will not have a material impact on any issues scoped in R.20-01-007. Therefore, we

<sup>&</sup>lt;sup>84</sup> Opening Comments of SWG at 7.

<sup>&</sup>lt;sup>85</sup> R.20-01-007 Scoping Ruling dated January 5, 2022 at 2-11.

deny SWG's recommendation to delay a decision in this proceeding until

R.20-01-007 concludes.

#### 6. Non-Residential Gas Line Subsidies Revisions

Of the 18 parties commenting on eliminating the gas line subsidies for non-residential customers, 12 parties support the Staff Proposal and six oppose.

#### 6.1. Positions of Parties Supporting the Staff Proposal

The 12 parties who endorse the Staff Proposal to eliminate gas line subsidies for the non-residential sector are: SCE, Cal Advocates, CEJA, EDF, NRDC, Sierra Club, TURN, EBCE, MCE, SCP, PCE, and SBUA. In addition to many of the same points made supporting the elimination of the gas line subsidies for the residential sector as discussed above, they make these additional points in support of eliminating the gas line subsidies for non-residential customers:

- Elimination of the gas line subsidies is a reasonable and necessary step in pursuit of reducing GHG emissions given that California is at substantial risk of not achieving its SB 32 requirement to reduce emissions to 40 percent below 1990 levels by 2030, and as such, California must pursue carbon neutrality with urgency;
- Elimination of the gas line subsidies does not equate to a gas ban as builders and customers can continue to build new facilities with gas service capabilities, and there is currently no mandate prohibiting customers from continuing to install gas infrastructure; and
- Large non-residential customers are the most significant contributors to GHG gas emissions with great potential to drive problematic expansion of the main gas line infrastructure further beyond existing use areas.

## 6.2. Positions of Parties Opposing the Staff Proposal

The six parties who oppose the Staff Proposal to eliminate gas line subsidies for the non-residential sector are: PG&E, SDG&E, SoCalGas, SWG, Clean Energy, and CCUE. In addition to many of the same points made opposing the elimination of the gas line subsidies for the residential sector as discussed above, they make these additional points in opposition to eliminating the gas line subsidies for non-residential customers:

- There is continued need for gas and the natural gas system specifically in the industrial sectors that have yet to see energy options that can help them transition to a decarbonized future. Cleaner gases can replace or contribute to the natural gas service and full electrification, contributing to California's energy objectives;
- Removing gas line subsidies for large non-residential or industrial customers will result in a net increase in GHG emissions because it will disincentivize the use and production of cleaner gases, which can replace higher GHG emitting fuels, or "dirtier fuels";
- Removing gas line subsidies for large non-residential or industrial customers will increase project costs and create additional hardship, which may cause developers to slow down projects, abandon projects or develop projects outside California, negatively impacting California's economy; and
- Minimizing short lived climate pollutants (SLCPs) should be the Commission's top priority, as opposed to eliminating non-residential gas line subsidies, as these are the only reductions that benefit the climate immediately.

## 6.3. Alternate Proposals

#### 6.3.1. Exemptions for Specific List of Projects that Provide Environmental or Financial Benefits (Joint IOUs)

The Joint IOUs propose to continue the non-residential gas line subsidies for several categories of non-residential projects that provide environmental or financial benefits to California ratepayers. They also propose a mechanism to update these categories periodically. According to the Joint IOUs, the following 10 non-residential projects would provide environmental or financial benefits to California ratepayers:<sup>86</sup>

- Renewable Natural Gas (RNG) or Hydrogen (Piped and Virtual);
- Compressed Natural Gas (CNG), Liquid Natural Gas, and Hydrogen Stations;
- Electric Generation Projects;
- Backup Generation Projects;
- Facility Conversions (facilities switching from dirtier fuels);
- Large Commercial Customers;
- Industrial Customers;
- Transmission Customers;
- Critical Load; and
- Restaurants (proposed by SDG&E and SoCalGas).

The Joint IOUs also propose that the categories of customers receiving gas line subsidies would be reviewed via a Tier 2 AL (to be filed every three years starting in 2026) or that a cadence for re-visiting the subsidies be established in the ongoing long term gas planning proceeding (R.20-01-007). In support, they

<sup>&</sup>lt;sup>86</sup> Opening Comments of the Joint IOUs on Phase III Staff Proposal at 7.

say the review would ensure that gas ratepayers continue to benefit from providing gas line subsidies. According to the Joint IOUs, "non-residential customers identified as having economic and environmental benefits to gas ratepayers can shift over time and that the removal of residential allowances may have a negative impact on affordable housing developers."<sup>87</sup>

Additionally, PG&E proposes two new methods for calculating the allowance amounts for non-residential projects that provide environmental or financial benefits to California ratepayers: (1) the ability for all current calculations of distribution to be applied to the non-residential projects; and (2) the addition of a graduated discount when additional load reduces GHG emissions. PG&E also proposes that the gas line subsidies be modified such that customers cannot switch from core service to noncore service until the allowance amount is fully recovered through revenue. In support, PG&E states that the current practice of switching from core to non-core service creates an unsustainable loophole where core customers can receive a higher allowance amount which may not be fully repaid should they switch to non-core service before the allowance amount is recovered.<sup>88</sup>

## 6.3.2. Exemptions for Projects That Enable Hydrogen, RNG and CNG Use (Clean Energy)

Clean Energy recommends that the Commission prioritize the phase-out of diesel in the transportation, electricity, and agricultural sectors. To do this, Clean Energy proposes maintaining incentives for customers seeking to develop hydrogen, agricultural customers seeking to produce biogas and RNG from

<sup>&</sup>lt;sup>87</sup> Opening Comments of the Joint IOUs on Phase III Staff Proposal at 10.

<sup>&</sup>lt;sup>88</sup> Opening Comments of the Joint IOUs on Phase III Staff Proposal at 13.

manure, and private companies investing in CNG fueling stations that distribute RNG to facilitate reductions in SLCP.<sup>89</sup>

For the transportation sector, Clean Energy states that the gas line subsidies make construction of new CNG fueling stations financially viable and present opportunities for collocation with hydrogen fueling stations.<sup>90</sup> For the electricity sector, they argue that renewable gas, including biogas and hydrogen from organic waste, can provide the same reliability services with far lower emissions than diesel backup generators.<sup>91</sup> For the agricultural sector, they state that agricultural feedstock RNG (particularly negative carbon RNG feedstock such as animal agriculture) can significantly lower GHG emissions, and help the state achieve its climate goals.<sup>92</sup> Therefore continuing gas line subsidies for these customers will encourage further development of these "carbon beneficial" fuel options.

#### 6.3.3. Application Process for Select Projects that Provide Environmental or Financial Benefits (Joint Parties and TURN)

The Joint Parties and TURN oppose providing any exceptions to offering the gas line subsidies, but state that if the Commission decides to provide limited exemptions, it should require the IOUs to submit a stand-alone application seeking ratepayer support for specific line extension projects. They assert that the

<sup>&</sup>lt;sup>89</sup> Comments of Clean Energy on Amended Scoping Memo and Ruling and Staff Proposal at 2-3.

<sup>&</sup>lt;sup>90</sup> Comments of Clean Energy on Amended Scoping Memo and Ruling and Staff Proposal at 11-13.

<sup>&</sup>lt;sup>91</sup> Comments of Clean Energy on Amended Scoping Memo and Ruling and Staff Proposal at 6.

<sup>&</sup>lt;sup>92</sup> Response of Clean Energy to Assigned ALJs' Ruling Seeking Clarification and Additional Information at 10-15.

IOUs should demonstrate that ratepayer funding is just and reasonable in light of reasonably anticipated ratepayer benefits and in furtherance of California's decarbonization policy.<sup>93</sup> Specifically, the Joint Parties propose that the application meet the following minimum criteria: (1) the extension does not emit local criteria or toxic air pollution; (2) the extension is not located in an environmental and social justice community; (3) the extension is consistent with all California climate goals; (4) the project does not claim any environmental credits; and (5) there are no feasible non-pipeline alternatives to the extension.<sup>94</sup> Given the need to verify these facts with discovery, the Joint Parties recommend an expedited application process that should receive at least the same level of scrutiny as a Tier 3 AL, where the applicants must demonstrate the factual basis for its assertions, and parties are allowed to conduct discovery to verify that each of the suggested criteria have been met. TURN also recommends that if exceptions are made to preserve gas line subsidies for some non-residential customers, the Commission should protect residential customers and require the non-residential customer classes to subsidize the costs.95

#### 6.3.4. Assistance for Low Income, Rural and Small Businesses (SBUA)

SBUA supports the elimination of gas line subsidies for non-residential customers, but recommends replacing the allowance regime with direct assistance to small businesses not currently connected to gas infrastructure but who upgrade to high-efficiency electric appliances in furtherance of the state's

<sup>&</sup>lt;sup>93</sup> Reply Comments of Joint Parties and TURN on Phase III Staff Proposal at 10-14.

<sup>&</sup>lt;sup>94</sup> Response of CEJA, EDF, NRDC, and Sierra Club to the Assigned ALJs' Ruling Seeking Clarifications and Additional Information at 6-10.

<sup>&</sup>lt;sup>95</sup> Reply Brief of TURN at 8.

GHG emission goals. More specifically, they propose: (1) opening a further phase of this proceeding to understand the support required to assist small businesses in overcoming barriers to electrification, such as by providing subsidies for appliance or panel upgrades in locations where stranded asset problems are most likely to be acute or where propane reliance is high; (2) establishing a pilot project to investigate the effectiveness of electrification incentive programs, akin to the San Joaquin Valley Pilots (D.18-12-015) referenced in the Staff Proposal; and (3) requiring electric utilities, through the advice letter process, to gather further data on bill savings comparisons between gas and electric usage and propose programs to address financial barriers to adoption of electric appliances.<sup>96</sup>

#### 6.4. Discussion

#### 6.4.1. Elimination of Non-Residential Gas Line Subsidies: Approved

This decision adopts the staff's proposal to eliminate the non-residential gas line subsidies effective July 1, 2023. The elimination of subsidies applies to new applications for gas line extensions submitted on or after July 1, 2023, and will not affect applications submitted before July 1, 2023. Within 30 days of the date of this order, the gas IOUs shall each submit a Tier 2 AL to revise their respective gas rules to implement this decision.

Gas line subsidies are eliminated for the non-residential sector for the same reasons as for the residential sector. These benefits include significant ratepayer savings, reductions in GHG emissions, combating climate change, improved overall quality of life, greater certainty for the builder community, and benefits

<sup>&</sup>lt;sup>96</sup> Opening Brief of SBUA at 8-9.

to low-income customers. The Commission reiterates that the elimination of these subsidies is one of many necessary and important steps in furthering California's decarbonization goals, while easing the burden on gas ratepayers, ensuring grid safety and reliability, and continuing to promote alternative clean fuels.

We also adopt the proposal of the Joint Parties and TURN, with modifications, to allow individual applications for the provision of gas line subsidies for select unique projects meeting specific application criteria discussed below.

The Commission agrees with SBUA and other parties that large non-residential customers are the most significant contributors to GHG gas emissions,<sup>97</sup> making it especially important to adopt this policy change for this customer segment. Absent this change, non-residential customers create the great potential to drive problematic expansion of gas line infrastructure beyond existing use areas, and create additional stranded investment.

Therefore, we eliminate gas line subsidies to promote the many benefits of this policy. However, gas line subsidies may be extended to a limited number of unique gas line extension projects meeting specific criteria, and will be reviewed through the application process outlined below.

#### 6.4.2. Exemptions for Specific List of Projects that Provide Environmental or Financial Benefits: Denied

This decision denies the Joint IOUs' proposal to continue offering gas line subsidies to their proposed list of 10 non-residential project categories that might

<sup>&</sup>lt;sup>97</sup> Reply Brief of SBUA at 2 and <u>https://ww2.arb.ca.gov/ghg-inventory-data</u>.

provide environmental and financial benefits to ratepayers. We are not convinced by the Joint IOUs' argument that an exception for a specific group of projects is necessary given the urgent nature of California's decarbonization goals and the likelihood that any new gas investments could become stranded assets in the future. Rather, as explained below, the potential benefits of an exemption for a specific group of customers are outweighed by the environmental and stranded investment costs.

The Joint IOUs propose this exception for a group of large non-residential customers that they argue provide environmental and financial benefits. The categories, however, are very broad and vague, such as "large commercial customers" and "industrial customers." It would not be reasonable to adopt a category as broad as "industrial customers" since not every project serving an industrial customer can be said to provide environmental or financial benefits to California ratepayers. Adopting the Joint IOUs' proposal as is could effectively make the elimination for the gas line subsidies largely meaningless, while adding confusion and administrative inefficiencies to the process as the categories are reviewed and parties argue for adjusting the categories.

Moreover, most parties, even when prompted by the assigned ALJs to be more specific,<sup>98</sup> did not provide a sufficiently unambiguous and clear definition of what constitutes environmental and financial benefits for the Commission to adopt this as a workable basis to establish categories. Instead, the Joint IOUs only provide a list of 10 categories they claim provide financial and/or environmental benefits to California ratepayers.

<sup>&</sup>lt;sup>98</sup> January 28, 2022 ALJ Ruling Seeking Clarification and Additional Information, Attachment 1 at 3.

PG&E and Clean Energy, on the other hand, propose the following

definitions within the limited context of this proceeding. PG&E proposes:<sup>99</sup>

- <u>Direct Environmental Benefit</u>: A project offers a direct environmental benefit where it provides on-site GHG, NOx, or other pollutant reduction compared an existing fuel baseline.
- <u>Indirect Environmental Benefit</u>: A project offers an indirect environmental benefit where it displaces either existing gas system emissions (*e.g.*, through renewable natural gas) or off-site (*e.g.*, through CNG) GHG, NOx, or other pollutant emissions.
- <u>Financial Benefit</u>: Broadly, a new gas connection offers financial benefit to all gas ratepayers where the connecting customer financially contributes, via gas rates, in excess of the costs to extend gas service to that customer. The customer may also offer financial benefit in the form of externalities that are more difficult to quantify (*e.g.*, job creation, increased state and local tax revenue, and local development).

Clean Energy proposes:<sup>100</sup>

- <u>Environmental Benefit</u>: (a) receipt of any tradable environmental attributes; (b) reduction of SLCPs; (c) reduction of GHG emissions; or (d) reduction of regulated air or water pollutants.
- <u>Financial Benefit</u>: (a) addresses the pay-back period for the gas line subsidies; (b) reduces system costs by more than the cost of the subsidy; or (c) contributes significantly to racial or social equity, public health, community resilience, or a robust economy.

<sup>&</sup>lt;sup>99</sup> PG&E's Response to Assigned ALJ's Ruling Seeking Clarification and Additional Information at 6-7.

<sup>&</sup>lt;sup>100</sup> Reply Comments of Clean Energy on Amended Scoping Memo and Ruling and Staff Proposal at 4.

We appreciate the proposals of PG&E and Clean Energy but find these definitions overly broad and lacking in adequate benchmarks or specific criteria for how to establish the 10 categories for potentially vast numbers of different projects, all of which would qualify for the exception. Absent an adequate definition or a reasonably accurate baseline for calculating environmental or financial benefits, many categories of projects could broadly make a case for the exception, and many customers might be granted exemptions even if the criteria are imprecise. We share TURN's concern that:

Any project that adds new customer load to the gas system could, all else being equal, provide a contribution to margin for at least some amount of time. However, any system buildout today could become a stranded asset well before the end of the asset's life because of electrification — whether mandated by state or local building codes or inspired by ratepayer-funded incentive programs and market transformation. This serious risk cuts against any near-term financial benefits from increased sales associated with new customer load.<sup>101</sup>

Thus, along with the lack of adequate definitions and criteria provided by the Joint IOUs, PG&E and Clean Energy, and without sufficient information and analysis on the record, we are not convinced that continuing gas line subsidies for this broad set of non-residential projects would lead to the benefits claimed.

We acknowledge that there may be limited circumstances where gas line extensions for some non-residential projects can be beneficial. Nonetheless, these potentially limited circumstances are not sufficient to warrant blanket subsidies for various broad categories of projects, such as the 10 project types proposed by the Joint IOUs. Not only would this be complicated, but more importantly, this

<sup>&</sup>lt;sup>101</sup> Opening Brief of TURN at 8.

would be misaligned with California's overall decarbonization goals. Exceptions for such broad categories of projects would perpetuate, even if on a smaller scale, the continued reliance on gas and locking in gas use for the life of the asset.

Instead, we adopt a limited alternative below that considers applications for specific and unique projects meeting a narrow set of criteria that may warrant gas line subsidies. This will account for the special cases of environmental, financial, or other benefits without creating up to 10 broad project categories.

This decision also denies PG&E's proposal for two new methods for calculating allowance amounts. We find this proposal now moot since we eliminate all gas line subsidies. Moreover, we do not wish to complicate the application process described below with additional factors.

#### 6.4.3. Exemptions for Projects That Enable Hydrogen, RNG and CNG Use: Denied

This decision denies Clean Energy's proposal to continue offering blanket gas line subsidies for non-residential transportation, agricultural, commercial, and industrial projects that enable RNG use in order to prioritize reduction in SLCP emissions. We are not convinced by Clean Energy's argument that gas line subsidies should continue to be offered to the non-residential sector to advance the goal of reducing SLCPs. Rather, we believe that ending gas line subsidies and supporting the hydrogen/RNG/CNG sector to reduce SLCPs can be successfully achieved together.

Clean Energy claims that the lack of gas line subsidies could be the sole reason that a new project will not be built, because the project may no longer be economical.<sup>102</sup> Clean Energy argues that typically, a CNG project will cost

<sup>&</sup>lt;sup>102</sup> Opening Brief of Clean Energy at 24.

approximately \$1.5-\$2.0 million plus a gas line extension cost of \$400,000-\$500,000 — approximately 25 percent of the investment.<sup>103</sup> Clean Energy does not, however, state whether the full gas line extension cost is eligible for gas line subsidies. As noted earlier in this decision, gas line extension costs are made up of a refundable portion and a non-refundable portion, with only the refundable portion being eligible for a subsidy. Clean Energy also does not provide data on average subsidies received for its projects. Recent data provided by the IOUs show the following average non-residential subsidies paid below.

Table 5.	Average Subsidies Paid to Non-Residential Projects in 2021
----------	--

	Average Subsidies Paid Per Project in 2021 <sup>104</sup>			
Gas Line Subsidies	PG&E	SoCalGas	SDG&E	SWG
Allowances	\$12,030	\$7,058	Not Provided	\$107,228
Refunds	\$490	\$0	\$9,056	Not Provided
Discounts	\$8,702	\$74	Not Provided	\$4,418

Although these average subsidies are not identified by project type, we note that they are far below the CNG gas line extension estimate of \$400,000 to \$500,00<sup>105</sup> provided by Clean Energy. Given the absence of sufficient information to support Clean Energy's claim, and based on the gas IOUs' 2021 average subsidies as shown above, the Commission is not convinced by the speculative argument that eliminating the gas line subsidies for non-residential project could be the sole reason that a new project will not be built.

<sup>&</sup>lt;sup>103</sup> *Id. at* 30.

<sup>&</sup>lt;sup>104</sup> April 18, 2022 ALJ Ruling, Attachment 5.

<sup>&</sup>lt;sup>105</sup> Assuming the full amount is refundable as defined under the gas rules.

While this analysis suggests that the average subsidies may be small compared to the overall project costs, we acknowledge that there may be some CNG/RNG/hydrogen projects at the margin where the subsidy makes up a larger portion of total project costs. However, no compelling evidence demonstrates that the gas line subsidies are actually necessary, or are the tipping point, to encourage these larger customers to make the "cleaner" gas investments. Rather, many factors are involved in a developer deciding to develop or not develop a project. While we understand that the elimination of these subsidies would make some projects more expensive, simply pointing this out does not prove it is the driving or controlling factor in a decision, and we are not convinced, absent specific evidence or examples of representative projects, that it is a significant enough change to halt such projects altogether. This is especially true given that there are existing subsidies and programs that offer incentives for the development of alternative fuels, including \$40 million for bio-SNG (synthetic natural gas) incentives that was authorized in D.22-02-025.<sup>106</sup>

The Commission also disagrees with Clean Energy that by making these projects more expensive, we are decelerating the move towards the use of cleaner fuels in the transportation/mobility sector that would otherwise reduce GHG emissions and help displace SLCPs. Many factors affect the use of alternative fuels in transportation, such as technology and state policy. As discussed above, gas line subsidies date back to the 1970s and the current rules on gas line subsidies were adopted in 2007. Yet, Clean Energy's data shows that only

<sup>&</sup>lt;sup>106</sup> D.22-02-025, Ordering Paragraph 43.

#### R.19-01-011 COM/CR6/nd3

3 percent of trucks in large fleets are powered by natural gas, and 0.01 percent are powered by hydrogen.<sup>107</sup>

Although we agree with Clean Energy that the use of CNG/RNG/ hydrogen is a preferred option over diesel and other "dirtier" fuels during a transition to full electrification, it is still not the preferred option in the long term over full electrification.<sup>108</sup> Our priority in the long term is to move away from fossil fuels altogether, including in the transportation sector, as opposed to supporting less harmful fossil fuels. This has been consistent and reiterated in several Commission proceedings.<sup>109</sup> It is also the policy of our sister agencies, which have also encouraged the move away from fossil fuel investment. For example, the CEC's California Clean Transportation Program has shifted focus significantly since 2019 to heavily prioritize zero emission vehicles (ZEVs) over near zero emission vehicles. CARB has adopted rules requiring 100 percent medium duty and heavy duty ZEVs by 2045 (to the fullest extent feasible). It has explained that "Infrastructure for methane trucks is expensive and would become a stranded asset if use of those [electric-fueled] trucks continued to expand; EV infrastructure, in contrast, will be needed indefinitely."<sup>110</sup> In light of these state policies, long term gas line subsidies to expand CNG infrastructure does not merit a categorical exemption from our overall policy adopted here.

<sup>&</sup>lt;sup>107</sup> Opening Brief of Clean Energy at 28.

<sup>&</sup>lt;sup>108</sup> Further, even though electrification is our preferred option, we recognize that for now, RNG plays an important role in reducing GHG emissions. This decision is not intended to conflict with that policy, as outlined in D.22-02-025.

<sup>&</sup>lt;sup>109</sup> D.22-03-006, D.19-09-051, D.22-02-025, and Rejection of SoCalGas's AL 5590.

<sup>&</sup>lt;sup>110</sup> CARB Technical Analysis of End of Useful Life Scenarios at 2 (<u>https://ww2.arb.ca.gov/resources/documents/technical-analysis-end-useful-life-scenarios-statewide</u>).

Additionally, we note that most of the cleaner fuels are already heavily subsidized, and eliminating the gas line subsidies would not undermine their development in any significant way. The table below summarizes these subsidies as approved by the Commission, and does not include additional subsidies that may be available from other sources.

Fuel type	Subsidy Budget	Authorized By
Bio-SNG	\$40 million	D.22-02-025
Biomethane	\$40 million	D.15-06-029
Biomethane (augment)	\$40 million	D.20-12-031

**Table 6**.
 Commission Approved Subsidies for Alternate Fuels

Lastly, we reiterate that the elimination of these subsidies does not remove the builder or developer's choice to build the CNG/RNG facility, it only requires that the costs caused by new customers be paid by those customers. And, in the limited cases where a gas line subsidy may still be warranted, we provide an application process below to consider specific, unique projects that claim to be unable to proceed without a gas line subsidy.

## 6.4.4. Application Process for Select Projects that Provide Environmental or Financial Benefits: Approved with Modifications

This decision approves the Joint Parties and TURN's proposal for an application process, with modifications, for those specific, unique non-residential projects where a gas line subsidy may still be warranted. For these projects, the gas IOUs shall evaluate the project based on the criteria established in this decision and file an application with the Commission for approval of a gas line subsidy on behalf of the project applicant(s). The IOUs shall ensure that projects seeking a gas line subsidy shall meet the following minimum criteria based on the information provided by the applicant(s) before including it in an annual filing to the Commission seeking such subsidies. These minimum requirements are:

- (1) The project will lead to a demonstrable reduction in GHG emissions;
- (2) The gas line extension required for the project is consistent with California's climate goals, including those articulated in SB 32 (Pavley, 2016); and
- (3) The project applicant demonstrates that it has no feasible alternatives to the use of natural gas, including electrification.

We do not include the other criteria proposed by the Joint Parties and TURN (the extension is not located in an environmental and social justice community, and the project does not claim any environmental credits) at this time. We are not persuaded that these additional criteria are necessary in assessing the impacts of the project.

If there are projects seeking gas line subsidies that an IOU determines meets the above criteria, the IOU shall file an annual application, by July 1 of each year beginning in 2023, and include all qualified projects requesting a gas line subsidy. Even though this decision eliminates gas line subsidies for all customer classes, it does not change the methodology for the calculation of gas line subsidies if the Commissions grants gas line subsidies for specific projects through the application process. In its annual filing, each IOU should include an update to the non-residential gas line extension allowance calculations based on the current methodology (including all inputs used, *e.g.*, cost of service factor). The IOUs, on behalf of the project applicant(s), must demonstrate the factual basis for the project applicants' assertions, and confirm that the minimum requirements have been met based on the information provided by applicants.<sup>111</sup> The Commission will evaluate the types of applications that are found to be deserving of gas line subsidies over the next few application cycles, and may revisit the need for categorical exemptions at a later time. The IOUs may propose potential categorical exemptions in their annual filing after two application cycles. The IOUs may also reference similar projects that have received gas line subsidies in their annual filing, and over time, this could reduce the burden on applicants and IOUs in demonstrating eligibility for these subsidies.

Lastly, the Commission denies TURN's proposal to modify the cost allocation/collection methodology of these subsidies to only require non-residential customer classes to subsidize the costs.<sup>112</sup> We do this because these projects, if approved for subsidies through this application process, would have demonstrated that they will reduce GHG emissions and be consistent with California's climate goals. This benefits all ratepayers, not just the non-residential customer class. The Commission also believes the resulting subsidies, if any, will not be so large as to justify the additional administrative burden to distribute the costs in proportion to the benefits received by customer class.

#### 6.4.5. Assistance for Low Income, Rural and Small Businesses: Approved with Modifications

We approve SBUA's proposal to further investigate the needs of small businesses not currently connected to gas infrastructure that move towards electrification. Although this decision does not make any special exceptions for

<sup>&</sup>lt;sup>111</sup> Each IOU must determine that each applicant's project meets the criteria based on the information provided by the applicants. In addition, each IOU's application may include prepared proposed testimony from the applicant in support of the application.

<sup>&</sup>lt;sup>112</sup> Reply Brief of TURN at 8.

the treatment of small businesses in regard to electrification, we are committed to

considering the unique challenges to electrification faced by small businesses in

future phases of this proceeding.

#### 7. Compliance with Pub. Util. Code Section 783(b)-(d)

Pub. Util. Code Section 783(b) states that:

Whenever the commission institutes an investigation into the terms and conditions for the extension of services provided by gas and electrical corporations to new or existing customers, or considers issuing an order or decision amending those terms or conditions, the commission shall make written findings on all of the following issues:

- The economic effect of the line and service extension terms and conditions upon agriculture, residential housing, mobile home parks, rural customers, urban customers, employment, and commercial and industrial building and development.
- (2) The effect of requiring new or existing customers applying for an extension to an electrical or gas corporation to provide transmission or distribution facilities for other customers who will apply to receive line and service extensions in the future.
- (3) The effect of requiring a new or existing customer applying for an extension to an electrical or gas corporation to be responsible for the distribution of, reinforcements of, relocations of, or additions to that gas or electrical corporation.
- (4) The economic effect of the terms and conditions upon projects, including redevelopment projects, funded or sponsored by cities, counties, or districts.
- (5) The effect of the line and service extension regulations, and any modifications to them, on existing ratepayers.

- (6) The effect of the line and service extension regulations, and any modifications to them, on the consumption and conservation of energy.
- (7) The extent to which there is cost-justification for a special line and service extension allowance for agriculture."<sup>113</sup>

Pub. Util. Code Section 783(c) states that:

The commission shall request the assistance of appropriate state agencies and departments in conducting any investigation or proceeding pursuant to subdivision (b), including, but not limited to, the Transportation Agency, the Department of Food and Agriculture, the Department of Consumer Affairs, the Bureau of Real Estate, and the Department of Housing and Community Development.<sup>114</sup>

Lastly, Pub. Util. Code Section 783(d) requires:

Any new order or decision issued pursuant to an investigation or proceeding conducted pursuant to subdivision (b) shall become effective on July 1 of the year which follows the year when the new order or decision is adopted by the commission, so as to ensure that the public has at least six months to consider the new order or decision.<sup>115</sup>

## 7.1. Staff Proposal

In response to Pub. Util. Code Section 783(b) the Staff Proposal addresses

each of the seven issues as follows.<sup>116</sup>

<sup>113</sup> See

https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?sectionNum=783&lawCo de=PUC.

<sup>&</sup>lt;sup>114</sup> See

https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?sectionNum=783&lawCo de=PUC.

<sup>&</sup>lt;sup>115</sup> See

https://leginfo.legislature.ca.gov/faces/codes\_displaySection.xhtml?sectionNum=783&lawCo de=PUC.

<sup>&</sup>lt;sup>116</sup> Phase III Scoping Memo, Appendix A at 33-36, 38-40, and 42-45.

On Issue 1, Staff expects that the elimination of gas line subsidies would increase the number of newly constructed all-electric buildings and that prices for those all-electric buildings will likely be less than those for an equivalent newly constructed dual fuel building. Dual fuel buildings constructed without gas line subsidies would be expected to cost more than they do today, but minimally (anywhere from 0.07 percent to 0.25 percent depending on the gas line subsidies type). Whether or not customer bills would be higher or lower in a new all-electric building vis-à-vis a new dual fuel building would depend on numerous factors that include tariff type, climate zone, future electricity prices, future gas prices, customer energy consumption habits, and time of energy usage.

On Issue 2, Staff does not expect the elimination of gas line subsidies to affect the current methods of providing transmission or distribution facilities for future customers, as the Staff Proposal is not proposing to modify such rules. If gas line subsidies are eliminated as proposed, and builders increase their rate of all-electric new construction, builders building dual fuel new construction further away from a point of gas pipeline interconnection could expect to pay more than they otherwise would be expected to if they have to pay for additional trenching and infrastructure that neighboring all-electric buildings did not need and thus did not help pay to extend from its current cut-off location.

On Issue 3, Staff expects the elimination of gas line subsidies for all new construction to result in increased costs to any customer seeking to extend a gas line. Depending on what infrastructure upgrades are necessary to extend gas service to the customer's building, the increased costs would vary.

On Issue 4, Staff does not expect the elimination of gas line subsidies for all new construction to result in changes specific to projects sponsored by cities, counties, or districts, as the Staff Proposal is not proposing any such changes. Should those projects be constructed all-electric, they will be less expensive than they are today, and should those projects be constructed dual fuel, they are anticipated to be only slightly more expensive than they are today.

On Issue 5, Staff expects the elimination of gas line subsidies for all new construction to lead to an annual reduction of approximately \$115,528,305 in allowances,<sup>117</sup> \$2,625,678 in refunds,<sup>118</sup> and \$26,195,639 in discounts<sup>119</sup> (with partial data for SDG&E) as a result of gas ratepayers no longer having to pay for gas line subsidies.<sup>120</sup> If a new building were to be constructed dual fuel without a gas line subsidy, gas ratepayers would save even more as a result of an additional customer sharing in costs necessary to maintain the common carrier pipeline network.

On Issue 6, Staff expects the elimination of gas line subsidies for all new construction to result in less gas consumption and more electricity consumption. Because gas consumed in California is overwhelmingly non-renewable and electricity is increasingly carbon-free, the encouragement of fuel substitution associated with adoption of Staff's recommendation would result in fewer GHG emissions and less air pollution. However, additional electrical load will gradually result in the need for additional electricity procurement and could pose challenges to managing winter peak electric demand if not properly planned for.

<sup>&</sup>lt;sup>117</sup> Phase III Scoping Memo, Appendix A at 35.

<sup>&</sup>lt;sup>118</sup> Phase III Scoping Memo, Appendix A at 39.

<sup>&</sup>lt;sup>119</sup> Phase III Scoping Memo, Appendix A at 44.

<sup>&</sup>lt;sup>120</sup> We note that since the publication of the Staff Proposal, the gas IOUs provided updated projections. (*See* April 18, 2022 ALJ Ruling, Attachment 5.)

On Issue 7, Staff does not recommend any special allowance for agricultural customers and, as such, there is no cost-justification for such an allowance. Agricultural operations typically use gas primarily for greenhouse heating and grain drying, both of which can be done using electricity. Additionally, the small property price increase for new dual fuel construction that can be expected if Staff's recommendation is adopted is insufficiently high to merit a special allowance for any customer class.

In response to Pub. Util. Code Section 783(c), Commission staff requested the assistance of the California State Transportation Agency, California Department of Food and Agriculture, DCA, DRE,<sup>121</sup> and HCD in developing the recommendations in its Staff Proposal. Staff states that the feedback that was received was considered as part of Staff's recommendations. Additionally, Staff consulted with CARB, CEC, and the California Strategic Growth Council.<sup>122</sup>

Lastly, in response to Pub. Util. Code Section 783(d), Staff recommends an effective date of July 1, 2023, in compliance with the minimum time required.

#### 7.2. Positions of Parties Supporting the Staff Proposal

Of the 14 parties commenting on the Staff Proposal's findings pursuant to Pub. Util. Code Section 783(b), 10 parties agree with the Staff Proposal's assessment of the seven issues and agree that eliminating gas line subsidies is within the Commission's legal purview. These parties are: Cal Advocates, CEJA, EDF, NRDC, Sierra Club, TURN, EBCE, MCE, SCP, and PCE. They make several points in support.

<sup>&</sup>lt;sup>121</sup> Statute requires the CPUC to request the assistance of the Bureau of Real Estate, which has since become DRE.

<sup>&</sup>lt;sup>122</sup> Phase III Scoping Memo, Appendix A at 2.

- The Staff Proposal sufficiently addresses the seven issues to make the requisite written findings;
- Statute does not specify the exact nature of the economic analysis required for the Commission to make the necessary findings pursuant to this section; and
- Statute does not require that new rules result in any particular findings (*e.g.*, favorable rate effects for customers) simply that they be documented.

## 7.3. Positions of Parties Opposing the Staff Proposal

Of the 14 parties commenting on the Staff Proposal's findings pursuant to

Pub. Util. Code Section 783(b), four parties disagree with the Staff Proposal's

assessment of the seven issues citing insufficient analysis. These parties are:

SDG&E, SoCalGas, SBUA, and Clean Energy. They make several points in

opposition.

- The record of this proceeding does support written findings on all seven issues;
- There has been no examination of the impacts on agriculture, mobile home parks, rural and urban customers, employment, or commercial and industrial buildings and development (Pub. Util. Code Section 783(b)(1));
- There has been no examination of the impacts to customer bills (Pub. Util. Code Section 783(b)(5));
- There has been no discussion of the impact on the development of RNG fueling stations or hydrogen production sites;
- The Staff Proposal does not address the equity concern between the customer applying for the extension now and future customers applying for line extensions at a later time (Pub. Util. Code Section 783(b)(2));
- The Staff Proposal failed to show that staff consulted any city, county or district before arriving at the conclusion that

eliminating gas line subsidies would not have any effect on redevelopment projects, funded or sponsored by cities, counties, or districts (Pub. Util. Code Section 783(b)(4)); and

• A study should be conducted on the economic effects on residential housing, rural customers and urban customers and must include low-income customers, disadvantaged communities, and the affordable housing sector.

#### 7.4. Discussion

#### 7.4.1. Compliance with Pub. Util. Code Section 783(b)

In this decision, the Commission makes findings on each of the seven issues included in Pub. Util. Code Section 783(b). We do so by relying on the best information we have in the record of this proceeding.

We agree with the Joint Parties and TURN that the statute requires the Commission to make findings on questions such as "the effect of requiring new or existing customers applying for an extension to an electrical or gas corporation to provide transmission or distribution facilities for other customers who will apply to receive line and service extensions in the future." However, it does not require that the Commission arrives at any particular conclusions (*e.g.*, favorable rate effects for customers) simply that the Commission arrives at written findings for all seven issues set out in Pub. Util. Code Section 783(b).<sup>123</sup>

Moreover, the statute does not require the Commission to conduct or commission a study, or specify the exact nature of the economic analysis required before the Commission can make the necessary findings.

The Commission has considered the potential impacts of these changes as further discussed below and concludes that eliminating gas line subsidies will

<sup>&</sup>lt;sup>123</sup> Opening Comments of Joint Parties and TURN on Phase III Staff Proposal at 4.

have a net positive impact on all sectors mentioned in Pub. Util. Code Section 783(b) for all the reasons discussed in earlier sections of this decision. The record in this proceeding provides the Commission sufficient basis to eliminate gas line subsidies for all customer classes and we determine that this decision is in California's best interest and is consistent with other Commission decisions and legislative intent. More specifically, we make the following findings on each of the seven issues.

 The economic effect of the line and service extension terms and conditions upon agriculture, residential housing, mobile home parks, rural customers, urban customers, employment, and commercial and industrial building and development.

The Commission finds that the elimination of the gas line subsidies will have an overall net positive economic effect on these groups of customers. Gas rates paid by all gas customers will be reduced due to the reduction in gas line subsidies, estimated at an annual savings of \$164 million.

The Commission agrees with the Joint Parties that in light of state climate and equity objectives and the importance of price signals to discourage the expansion of the gas system and reliance on gas appliances, the benefits of ending gas line extensions outweigh the economic impact upon those customers that may incur additional line or service extension costs by continuing to choose to build an extension connecting to the gas system.<sup>124</sup> We also note that there are programs that can help reduce any potential cost increase for these groups including the Manufactured and Mobile Homes Program, the Mobile Home Park Utility Conversion Program, and BUILD.

<sup>&</sup>lt;sup>124</sup> Opening Brief of Joint Parties at 19-21.

In terms of employment, and as discussed in this decision, the Commission finds that there will likely be a net positive impact as we are likely to see an increase in demand for skilled workers in several economic sectors, including in the electric industry, construction jobs for energy efficiency improvements and building retrofits.

In terms of commercial and industrial building and development, and as discussed in this decision, the Commission finds that there will likely be an increase in the number of newly constructed all-electric buildings which will likely cost less than newly constructed dual fuel buildings.

Therefore, the Commission finds the "economic effect of gas line and service extension terms and conditions upon agricultural, residential housing, mobile home parks, rural customers, urban customers, employment, and commercial and industrial building and development" to be overall net positive.

(2) The effect of requiring new or existing customers applying for an extension to an electrical or gas corporation to provide transmission or distribution facilities for other customers who will apply to receive line and service extensions in the future.

The Commission agrees with the Staff Proposal<sup>125</sup> and the Joint Parties<sup>126</sup> that the elimination of gas line subsidies will have no effect on the current methods of providing transmission or distribution facilities for future customers.

We note that the elimination of gas line allowances may shift who pays which costs, but there is no change in the extent to which new or existing customers applying for an extension provide transmission or distribution facilities for future customers. We acknowledge that builders building dual fuel

<sup>&</sup>lt;sup>125</sup> Phase III Scoping Memo, Appendix A at 34, 39, and 42-43.

<sup>&</sup>lt;sup>126</sup> Opening Brief of Joint Parties at 21.

new construction away from a point of gas pipeline interconnection may pay more (*e.g.*, for additional trenching and infrastructure) than neighboring all-electric buildings (who do not need the additional trenching and gas infrastructure).

With respect to the magnitude of any such cost shift, no party presented credible evidence that it would be material and significantly disrupt necessary expansion of utility service. In light of the state's climate and equity objectives, the benefits of ending these subsidies to all gas customers outweigh any economic impact of developers that may receive lower subsidies due to neighboring developments opting for all-electric designs.

Therefore, we find that the actions in this decision do not have the "effect of requiring new or existing customers applying for a gas line extension to provide transmission and distribution facilities to other customers who receive line and service extension in the future." We find that the effect of this decision is limited to a shift in who pays which costs, this is not a material effect, and the negative effects on some customers, if any, are offset by the overall positive effects of reducing GHG emissions, improved quality of life and health for customers, hundreds of millions of dollars in total ratepayer savings annually, greater equity for low-income customers, and greater certainty for the builder and contractor community.

(3) The effect of requiring a new or existing customer applying for an extension to an electrical or gas corporation to be responsible for the distribution of, reinforcements of, relocations of, or additions to that gas or electrical corporation. The Commission agrees with the Staff Proposal<sup>127</sup> and the Joint Parties<sup>128</sup> that the elimination of gas line subsidies for all new construction will result in increased costs to any customer choosing to extend a gas line, with costs depending on what infrastructure upgrades are necessary to extend gas service to the customer's building. However as mentioned above, the benefits of ending these subsidies to all gas customers outweigh any economic impact on developers seeking to extend gas lines. Therefore, we find the "effect of requiring a new or existing customer applying for an extension to an electrical or gas corporation to be responsible for the distribution of, reinforcements of, relocations of, or additions to that gas or electrical corporation" to be: the new or existing customer will be responsible for and must pay the costs that are caused by that customer's line extension (including reinforcements, relocations, or additions). These costs are outweighed by the economic and environmental effects along with increased equity of having the cost-causer pay the costs that are incurred.

(4) The economic effect of the terms and conditions upon projects, including redevelopment projects, funded or sponsored by cities, counties, or districts.

The Commission agrees with the Joint Parties that the elimination of gas line subsidies may increase project costs (including those that are funded or sponsored by cities, counties, or districts) that choose to connect to the gas system.<sup>129</sup> However, as discussed above, the rates paid by all gas customers (including cities, counties, or districts as utility customers themselves) will be

<sup>&</sup>lt;sup>127</sup> Phase III Scoping Memo, Appendix A at 34, 39, and 43.

<sup>&</sup>lt;sup>128</sup> Opening Brief of Joint Parties at 21.

<sup>&</sup>lt;sup>129</sup> Opening Brief of Joint Parties at 21-22.

reduced due to the millions of dollars in ratepayer savings from eliminating the gas line subsidies. As such, we find that the "economic effect of the terms and conditions upon projects, including redevelopment projects, funded or sponsored by cities, counties, or districts" to be higher costs for those projects that choose to connect to the gas system but offset (at least in part) by reduced gas rates, and also offset by the environmental and social benefits of ending gas line subsidies.

(5) The effect of the line and service extension regulations, and any modifications to them, on existing ratepayers.

The Commission estimates that the elimination of gas line subsidies for all new construction (residential and non-residential) will lead to an annual savings of approximately \$164 million per year, as noted above. In addition to the ratepayer savings, other benefits to the ratepayers include reduction in GHG emissions and improving public health outcomes due to improved air quality. Thus, we find that the "effect of the line and service extension regulations, and any modifications to them, on existing ratepayers" is a savings of at least \$164 million per year, plus additional environmental, social and health benefits.

(6) The effect of the line and service extension regulations, and any modifications to them, on the consumption and conservation of energy.

The Commission agrees with the Staff Proposal that the elimination of gas line subsidies for all new construction will result in less gas extensions, less gas consumption, and more electricity consumption.<sup>130</sup> This will also result in fewer GHG emissions and less air pollution. That is because electric generation is now produced by a substantial amount of non-GHG polluting power plants, and the

<sup>&</sup>lt;sup>130</sup> Phase III Scoping Memo, Appendix A at 35, 40, and 44.

percentage of non-GHG producing power plants will increase over time as California meets its 100 percent clean electricity mandate of SB 100. With regard to energy conservation, to the extent elimination of these subsidies results in more all-electric construction, we agree with the Joint Parties that energy conservation will likely increase due to the efficiency of electric appliances.<sup>131</sup> Thus, we find the "effect of the line and service extension regulations, and any modifications to them, on consumption and conservation of energy" to be a reduction in gas consumption, an increase in electricity consumption, lower GHG emissions, less air pollution, and more energy conservation, with overall environmental, social and health benefits.

(7) The extent to which there is cost-justification for a special line and service extension allowance for agriculture.

The Commission find no impacts here as the proposal to eliminate gas line subsidies for all customer classes does not include special allowances for agricultural loads. No credible evidence was presented on a cost-justification, if any, for a special line and service extension allowance for agriculture.

Therefore, we conclude on these seven issues that the record in the proceeding provides the Commission sufficient basis to end gas line subsidies for all customer classes as this change is in California's best interest and is consistent with other Commission decisions and legislative intent. As attested by numerous parties, there are significant economy-wide climate, health, affordability, and equity benefits to eliminating gas line subsidies, in addition to the significant ratepayer savings as supported by the data in the Staff Proposal and the IOUs' ED-DR responses. In light of California's climate objectives and the importance of market signals to discourage further reliance on gas, we find that the benefits

<sup>&</sup>lt;sup>131</sup> Opening Brief of Joint Parties at 22.

of ending these subsidies as discussed thoroughly in this decision outweigh any potentially negative economic effects to any particular customer classes described within these seven issues.

## 7.4.2. Compliance with Pub. Util. Code Section 783(c)

In compliance with Pub. Util. Code Section 783(c), the Phase III Scoping Memo requested the assistance and input of the agencies and departments included in the statute. The Commission served the Phase III Scoping Memo on these agencies and invited them to participate in this proceeding (*e.g.*, submit comments and reply comments on the Staff Proposal).<sup>132</sup> Additionally, on November 17, 2021, the assigned Commissioner sent a follow up e-mail to the Executive Directors (or an equivalent position) of these agencies and departments and invited them to provide input on the Staff Proposal by December 20, 2021. No comments or responses from the state agencies and state departments were received.

## 7.4.3. Compliance with Pub. Util. Code Section 783(d)

Lastly, the revisions to the gas rules adopted in this decision are effective July 1, 2023, consistent with Pub. Util. Code Section 783(d).

## 8. Conclusion

Based on the record and the analysis above, we conclude that, consistent with the policy objectives of this rulemaking and the state's climate goals, the current gas line subsidies for all customer classes should be eliminated, effective July 1 of the year following today's order pursuant to Pub. Util. Code Section 783(c), on July 1, 2023. We also adopt an application process through which the

<sup>&</sup>lt;sup>132</sup> Phase III Scoping Memo at 1 and 12.

IOUs may seek gas line subsidies for individual projects meeting the criteria set out in this decision. This decision meets the statutory requirements as set forth in Pub. Util. Code Section 783(b)-(d).

## 9. Comments on Proposed Decision

The proposed decision of Commissioner Clifford Rechtschaffen in this matter was mailed to the parties in accordance with Pub. Util. Section 311 and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure (Rules). Comments were filed on August 30, 2022 by PG&E; SDG&E; SoCalGas; SCE; SWG; Clean Energy; the Joint Parties; SBUA; and The California Manufactures and Technology Association (CMTA). Reply comments were filed on September 6, 2022 by PG&E; SDG&E; SoCalGas; Clean Energy; the Joint Parties; SBUA; CMTA; and TURN.

Consistent with the Rules, we give no weight to comments that fail to focus on factual, legal, or technical errors (Rule 14.3(c)). In particular, we disregard comments that only reargue a party's position. In response to comments, we make the following revisions and clarifications:

- Corrections to non-substantive typographical errors and omissions.
- Clarification on the requirement of the IOUs, on behalf of the project applicant(s) seeking gas line subsidies, to demonstrate the factual basis for the project applicants' assertions, and confirm that the minimum requirements have been met based on the information provided by applicants.
- Removal of the requirement of the IOUs, on behalf of the project applicant(s) seeking gas line subsidies, to disclose all other incentives received by each project.

#### 10. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner and Scarlett Liang-Uejio and Ava Tran are the assigned ALJs in this proceeding.

#### **Findings of Fact**

1. The Commission initiated this proceeding to consider policy frameworks supporting decarbonization of buildings, including ongoing efforts to reduce GHG emissions associated with energy use in buildings.

2. The Phase I decision established the BUILD Program and the TECH Initiative pursuant to SB 1477.

3. The BUILD Program provides incentives to new residential housing projects that are all-electric and have no hookup to the gas distribution grid.

4. The TECH Initiative is a market transformation program providing incentives to advance the adoption of low-emission space and water hearing technologies.

5. The Phase II decision adopted: (a) guiding principles for the layering of incentives provided by multiple building decarbonization programs; (b) the WNDRR Program; (c) guidance on data sharing of customer and other information; and (d) requirements for the three large electric IOUs to conduct studies on bill impacts that result from fuel substitution for water heaters from natural gas to electric.

6. The Phase III Scoping Memo determined the issues to be resolved in Phase III including: (a) whether the Commission should modify or eliminate gas line extension allowances for some or all customer classes (residential and non-residential); (b) whether the Commission should modify or eliminate gas line extension refunds for some or all customer classes (residential and non-residential); and (c) whether the Commission should modify or eliminate gas line extension discounts for some or all customer classes (residential and non-residential).

7. The Energy Division Staff Proposal recommends revisions to the current gas rules to eliminate the gas line subsidies for all customer classes effective July 1, 2023.

8. Of the parties commenting on eliminating the gas line subsidies for residential customers, there is wide support for the Staff Proposal among parties representing a substantial range of social, economic, and environmental interests.

9. Of the parties commenting on eliminating the gas line subsidies for non-residential customers, there is substantial support for the Staff Proposal among parties representing a wide range of interests.

10. The current gas line subsidies were established during a period when the state's energy needs and policy goals were very different from today's, and are no longer consistent with today's GHG emission reduction goals, the urgent need to reduce gas rates to ensure affordability, and the long term need to minimize future stranded investment.

11. The Commission adopted a uniform set of rules for gas utility line and service extensions beginning in 1915.

12. Under current rules, gas IOUs are not obligated to extend gas lines free of cost but must provide the opportunity for customers to be connected to the utility system at reasonable prices, terms, and conditions.

13. Current gas rules incentivize the installation of more gas appliances which perpetuate reliance on gas service and lock in all associated GHG emissions for the life of the appliance unless the appliance is retired early and replaced with an electric alternative.

14. The elimination of gas line subsides would make gas line and service extensions more expensive to the applicant for new gas service, and dual fuel new construction less desirable and financially riskier.

15. Eliminating gas line subsidies for all customer classes will result in significant ratepayer savings over the life of the gas line extensions.

16. Eliminating gas line subsidies for all customer classes is a logical step toward building decarbonization, consistent with state objectives and the Commission's policy frameworks. It will further the state's climate goals of reducing GHG emissions 40 percent by 2030 and achieving carbon neutrality by 2045 or sooner.

17. Eliminating gas line subsidies for all customer classes will improve overall quality of life (GHG emissions reductions, ratepayer savings, benefits to low income customers), and provide greater certainty for the builder community and the contractor community.

18. Eliminating gas line subsidies for all customer classes will result in a net positive impact on the workforce, as any potential decrease in demand for jobs within the gas industry is offset by the likely increase in demand for workers in several economic sectors, including in the electric industry, construction jobs for energy efficiency improvements and building retrofits.

19. Eliminating gas line subsidies for all customer classes does not remove customer choice as customers can continue to select their choice of fuel, with the difference being that existing and future gas customers will no longer have to subsidize investments in the gas infrastructure for new customers.

20. Eliminating gas line subsidies for all customer classes will not negatively impact energy reliability.

21. Eliminating gas line subsidies for all customer classes will have minimal impacts on property prices.

22. Eliminating gas line subsidies for all customer classes and supporting the hydrogen/RNG/CNG sector to reduce SLCPs can be successfully achieved together.

23. Large non-residential customers are the most significant contributors to GHG emissions.

24. There may be limited circumstances where gas line extensions for some non-residential projects can be beneficial, and gas line subsidies for these projects may be warranted.

25. Consideration of modifying or eliminating gas line subsidies is governed by Pub. Util. Code Section 783(b), which requires the Commission to make written findings on the following seven issues:

- (a) The economic effect of the line and service extension terms and conditions upon agriculture, residential housing, mobile home parks, rural customers, urban customers, employment, and commercial and industrial building and development;
- (b) The effect of requiring new or existing customers applying for an extension to an electrical or gas corporation to provide transmission or distribution facilities for other customers who will apply to receive line and service extensions in the future;
- (c) The effect of requiring a new or existing customer applying for an extension to an electrical or gas corporation to be responsible for the distribution of, reinforcements of, relocations of, or additions to that gas or electrical corporation;
- (d) The economic effect of the terms and conditions upon projects, including redevelopment projects, funded or sponsored by cities, counties, or districts;

- (e) The effect of the line and service extension regulations, and any modifications to them, on existing ratepayers;
- (f) The effect of the line and service extension regulations, and any modifications to them, on the consumption and conservation of energy; and
- (g) The extent to which there is cost-justification for a special line and service extension allowance for agriculture.

26. Eliminating gas line subsidies will have the following impacts on the seven

issues governed by Pub. Util. Code Section 783(b):

- (a) The "economic effect of gas line and service extension terms and conditions upon agricultural, residential housing, mobile home parks, rural customers, urban customers, employment, and commercial and industrial building and development" will be overall net positive;
- (b) The "effect of requiring new or existing customers applying for a gas line extension to provide transmission and distribution facilities to other customers who receive line and service extension in the future" will be limited to a shift in who pays which costs, will not be a material effect, and any negative effects on some customers, if any, will be offset by the overall positive effects of reducing GHG emissions, improved quality of life and health for customers, hundreds of millions of dollars in total ratepayer savings annually, greater equity for low-income customers, and greater certainty for the builder and contractor community;
- (c) The "effect of requiring a new or existing customer applying for an extension to an electrical or gas corporation to be responsible for the distribution of, reinforcements of, relocations of, or additions to that gas or electrical corporation" will be that the new or existing customer will be responsible for and must pay the costs that are caused by that customer's line extension (including reinforcements, relocations, or additions). These costs will be outweighed by the economic and

environmental effects along with increased equity of having the cost-causer pay the costs that are incurred;

- (d) The "economic effect of the terms and conditions upon projects, including redevelopment projects, funded or sponsored by cities, counties, or districts" will be higher costs for those projects that choose to connect to the gas system but will be offset (at least in part) by reduced gas rates, and also offset by the environmental and social benefits of ending gas line subsidies;
- (e) The "effect of the line and service extension regulations, and any modifications to them, on existing ratepayers" will be savings of at least \$164 million per year, plus additional environmental, social and health benefits;
- (f) The "effect of the line and service extension regulations, and any modifications to them, on consumption and conservation of energy" will be a reduction in gas consumption, an increase in electricity consumption, lower GHG emissions, less air pollution, and more energy conservation, with overall environmental, social and health benefits; and
- (g) There will be no "extent to which there is cost justification for a special line and service extension allowance for agriculture."
- 27. Pub. Util. Code Section 783(c) requires that:

The commission shall request the assistance of appropriate state agencies and departments in conducting any investigation or proceeding pursuant to subdivision (b), including, but not limited to, the Transportation Agency, the Department of Food and Agriculture, the Department of Consumer Affairs, the Bureau of Real Estate, and the Department of Housing and Community Development.

28. Pub. Util. Code Section 783(d) requires that:

Any new order or decision issued pursuant to an investigation or proceeding conducted pursuant to subdivision (b) shall become effective on July 1 of the year which follows the year when the new order or decision is adopted by the commission, so as to ensure that the public has at least six months to consider the new order or decision.

29. During the course of this proceeding, the Commission provided notice and an opportunity to comment to those agencies identified in Pub. Util. Code Section 783(c).

## **Conclusions of Law**

1. The Commission should eliminate gas line extension allowances, refunds, and discounts for all customer classes, with limited exceptions.

2. The Commission should allow limited exceptions to the elimination of gas line subsidies by permitting a utility to file an application for projects that meet specific criteria.

3. The application should be filed each year by July 1 and must demonstrate that each project meets the following criteria:

- (a) The project shows a demonstrable reduction in GHG emissions;
- (b) The project's gas line extension is consistent with California's climate goals, including those articulated in SB 32 (Pavley, 2016); and
- (c) The project demonstrates that it has no feasible alternatives to the use of natural gas, including electrification.

4. The changes adopted in this decision to the gas rules comply with the statutory requirements of Pub. Util. Code Section 783(b)-(d).

5. The gas IOUs should each submit a Tier 2 AL to revise their gas line extension rules to eliminate gas line extension subsides in conformance with this decision. The revised rules should include the application process adopted in this decision allowing limited projects meeting the specific eligibility criteria set out in this decision to seek gas line extension allowances, refunds, and discounts. R.19-01-011 COM/CR6/nd3

## ORDER

## IT IS ORDERED that:

1. Gas line extension allowances, the 10-year refundable payment option, and the 50 percent discount option in current utility gas line extension rules shall be eliminated, as provided below:

- (a) Gas Line Extension Allowances: All allowances set forth in utilities' Gas Rule Nos. 15 and 16 (for Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southwest Gas Corporation) (collectively, the three gas utilities) and Gas Rule Nos. 20 and 21 (for Southern California Gas Company (SoCalGas)) shall be removed effective July 1, 2023, subject to the application process described in Ordering Paragraph (OP) 2 of this decision;
- (b) 10-Year Refundable Payment Option: All refunds set forth in utilities' Gas Rule Nos. 15 and 16 (for the three gas utilities) and Gas Rule Nos. 20 and 21 (for SoCalGas) shall be removed effective July 1, 2023, subject to the application process described in OP 2 of this decision; and
- (c) 50 Percent Discount Option: All discounts set forth in utilities' Gas Rule Nos. 15 and 16 (for the three gas utilities) and Gas Rule Nos. 20 and 21 (for SoCalGas) shall be removed effective on July 1, 2023, subject to the application process described in OP 2 of this decision.

2. Pacific Gas and Electric Company, San Diego Gas & Electric Company,

Southern California Gas Company and Southwest Gas Corporation (collectively, the gas utilities) may request approval from the California Public Utilities Commission (Commission) by an annual application for a gas line extension allowance, a 10-year refundable payment option, or a 50 percent discount payment option (gas line subsidy) for specific, unique non-residential projects meeting the criteria established in this decision. For those eligible projects, the gas utility shall file an application with the Commission, on behalf of the R.19-01-011 COM/CR6/nd3

applicant(s), for approval of a gas line subsidy, by July 1 of each year starting in 2023. In its annual filing, each investor-owned gas utility shall include an update to the non-residential gas line extension allowance calculations based on the current methodology (including all inputs used, *e.g.*, cost of service factor). The criteria are:

- (a) The project shows a demonstrable reduction in greenhouse gas emissions;
- (b) The project's gas line extension is consistent with California's climate goals, including those articulated in Senate Bill 32 (Pavley, 2016); and
- (c) The project demonstrates that it has no feasible alternatives to the use of natural gas, including electrification.

3. For those specific, unique non-residential projects where a gas line extension allowance, the 10-year refundable payment option, and the 50 percent discount payment option may still be warranted, the gas utilities, on behalf of the project applicants, shall demonstrate the factual basis for the project applicants' assertions, and confirm that the minimum requirements have been met based on the information provided by applicants before filing the annual application with the California Public Utilities Commission.

4. Within 30 days of the date of this order, Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas & Electric Company, and Southwest Gas Corporation shall each submit a Tier 2 Advice Letter to revise tariffs for their respective gas line extension rules that eliminate gas line extension subsides in conformance with this decision. The revised tariffs shall include the application process adopted in this decision allowing limited projects meeting the specific eligibility criteria set out in this decision to seek gas line extension allowances, 10-year refunds, or 50 percent discounts payment option. 5. Rulemaking 19-01-011 remains open.

This order is effective today.

Dated \_\_\_\_\_, at Clovis, California.

R.19-01-011 COM/CR6/nd3

PROPOSED DECISION (Rev.1)

# **APPENDIX A** Abbreviations, Acronyms, and Definitions

## APPENDIX A

# Abbreviations, Acronyms, and Definitions

А.	Application
ALJ	Administrative Law Judge
Allowances	Gas line extension allowances
Applicant	An entity (e.g., builder, developer, individual customer) who seeks connection to the utility system
AL	Advice Letter
April 18, 2022 ALJ Ruling	An ALJ ruling receiving into the evidentiary record the gas utilities' responses to the ED-DR
BUILD Program	Building Initiative for Low Emissions Development Program.
Cal Advocates	The Public Advocates Office of the Commission
CARB	California Air Resources Board
CCUE	Coalition of California Utility Employees
Commission	California Public Utilities Commission
CEC	California Energy Commission
CEJA	California Environmental Justice Alliance
CNG	Compressed Natural Gas
DCA	California Department of Consumer Affairs
DRE	California Department of Real Estate
EBCE	East Bay Community Energy
ED-DR	A March 14, 2022, Energy Division data request (ED-DR) sent to PG&E, SoCalGas, SDG&E and SWG; directed the gas utilities to verify and serve their responses to the ED-DR on all parties
EDF	Environmental Defense Fund
FY	Fiscal Year
GHG	Greenhouse Gas
Gas Line Subsidies	Gas line extension allowance, 10-year refundable payment option, or 50 percent discount payment option
Gas Rules	Gas line extension rules:

	Gas Rules 15-16 for PG&E (https://www.pge.com/tariffs/assets/pdf/tariffbook/GAS_RULES_15.pdf, https://www.pge.com/tariffs/assets/pdf/tariffbook/GAS_RULES_16.pdf), SDG&E (https://tariff.sdge.com/tm2/pdf/GAS_GAS- RULES_GRULE15.pdf, https://tariff.sdge.com/tm2/pdf/GAS_GAS-
	RULES_GRULE16.pdf), and SWG(https://www.swgas.com/1409184638489/rule15.pdf,https://www.swgas.com/1409184638517/RULE_16GRC_Eff-April-1-2021.pdf), and Gas Rules 20-21 for SoCalGas(https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/20.pdf,https://tariff.socalgas.com/regulatory/tariffs/tm2/pdf/21.pdf).Rule 15/20 pertains to gas distribution main extensions and Rule 16/21pertains to gas service line extensions.
HCD	California Department of Housing and Community Development
IOUs	Investor-owned utilities
Joint CCAs	EBCE, Marin Clean Energy, Peninsula Clean Energy, and Sonoma Clean Power
Joint IOUs	Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Gas Company
Joint Parties	California Environmental Justice Alliance, Environmental Defense Fund, Natural Resources Defense Council, and Sierra Club
МСЕ	Marin Clean Energy
NRDC	Natural Resources Defense Council
OIR	Order Instituting Rulemaking
OP	Ordering Paragraph
РСЕ	Peninsula Clean Energy
PG&E	Pacific Gas and Electric Company
Phase I Decision	D.20-03-027 established the two building decarbonization pilot programs required by SB 1477: the BUILD Program and the TECH Initiative.
Phase II Decision	D.21-11-002 (1) adopted guiding principles for the layering of incentives when multiple programs fund the same equipment; (2) established the WNDRR Program to provide financial incentives to help victims of wildfires and natural disasters rebuild all-electric properties; (3) provided guidance on data sharing; and (4) directed California's three large electric investor-owned utilities (IOUs)

Phase III Scoping Memo	An Amended Scoping Memo and Ruling setting forth the issues to be considered in Phase III of this proceeding issued on November 16, 2021.
Pub. Util. Code	Public Utilities Code
R.	Rulemaking
RNG	Renewable Natural Gas
SCE	Southern California Edison Company
SCP	Sonoma Clean Power
SB	Senate Bill
SBUA	Small Business Utility Advocates
SDG&E	San Diego Gas & Electric Company
SLCPs	Short Lived Climate Pollutants
SoCalGas	Southern California Gas Company
Staff Proposal	Staff Proposal on Phase III issues (Appendix A, Phase III Scoping Memo).
SWG	Southwest Gas Corporation
TECH Initiative	Technology and Equipment for Clean Heating Initiative.
TURN	The Utility Reform Network
WNDRR Program	Wildfire and Natural Disaster Resiliency Rebuild Program

# (END OF APPENDIX A)

Service Date: December 22, 2022

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	DOCKETS UE-220066 and UG-220067 ( <i>consolidated</i> )
Complainant,	FINAL ORDER 24
v.	
PUGET SOUND ENERGY,	
Respondent.	
In the Matter of the Petition of	DOCKET UG-210918
PUGET SOUND ENERGY	FINAL ORDER 10
For an Order Authorizing Deferred	
Accounting Treatment for Puget Sound	<b>REJECTING TARIFF SHEETS;</b>
Energy's Share of Costs Associated with	APPROVING SETTLEMENTS, WITH
the Tacoma LNG Facility	CONDITIONS; AUTHORIZING AND
	<b>REQUIRING COMPLIANCE FILING</b>

**Synopsis**: The Commission approves and adopts three partial multiparty settlements, subject to limited conditions, that, considered together, resolve all the issues in this consolidated proceeding for Puget Sound Energy (PSE).

The Revenue Requirement Settlement provides for a two-year rate plan starting on January 1, 2023, approves a capital structure of 49 percent equity and 51 percent debt, sets cost of debt at 5.0 percent for the duration of the rate plan, maintains PSE's return on equity at 9.40 percent, provides for more timely recovery of power costs, provides for a pilot of time-varying rates (TVR), allows for provisional recovery of certain investments including Energize Eastside, creates a Demand Response (DR) Performance Incentive Mechanism (PIM), requires reporting on a number of metrics, and addresses a number of issues that are no longer disputed by the parties. The Settling Parties agree to, and the Commission approves with conditions in this Order, an increase to electric rates of \$223 million in rate year one and \$38 million in rate year two; and an increase to natural gas rates of \$70.6 million in rate year one both years combined.

As a result of the Revenue Requirement Settlement, a typical residential electric customer using 800 kWhs per month will pay \$7.75 more per month in rate year one, for an average monthly bill of \$96.65, and will pay \$1.67 more per month in rate year two, for an average monthly bill of \$98.32. A typical residential natural gas customer using 64 therms per month

# DOCKETS UE-220066, UG-220067, & UG-210918 (Consolidated) PAGE 2 FINAL ORDER 24/10 PAGE 2

will pay \$4.87 more per month in rate year one, for an average monthly bill of \$80.56; and will pay \$1.34 more per month in rate year two, for an average monthly bill of \$81.90.

The Commission also approves and adopts the Green Direct Settlement, which provides a methodology for calculating the Energy Charge Credit. It is anticipated that this will provide current Green Direct customers with more predictable power costs.

Finally, the Commission approves and adopts the Tacoma Liquified Natural Gas (LNG) Settlement, which authorizes PSE to seek a prudency determination and recovery of the costs related to the Tacoma LNG Facility concurrent with its 2022 Purchase Gas Adjustment filing. The Tacoma LNG Facility costs will be tracked in a separate tariff schedule. The Commission accepts this Settlement subject to the condition that PSE recovers the costs of 4 miles of distribution pipe on a provisional basis and defers associated revenues as described in this Order.

### DOCKETS UE-220066, UG-220067, & UG-210918 (Consolidated) FINAL ORDER 24/10

PAGE 3

# TABLE OF CONTENTS

BAG	CKG	ROUND
ME	MOR	ANDUM
I.		STANDARD OF REVIEW11
	A.	Regulating in the public interest and determining equitable, fair, just, reasonable,
	and	sufficient rates
	B.	The Commission's process for considering settlements
II.		REVENUE REQUIREMENT SETTLEMENT
	C.	Overview of the Revenue Requirement Settlement and Supporting Testimony14
	D.	The Revenue Requirement Settlement's proposed two-year MYRP
	E.	The Revenue Requirement Settlement's Proposed Performance-based Metrics and
	Ince	ntives
	F.	Performance Measures Pursuant to RCW 80.28.425(7)
	G.	Capital Structure
	H.	Return on Equity
	I.	The Infrastructure Investment and Jobs Act of 2021 and Inflation Reduction Act
		50
	J.	Energize Eastside
	K.	Significant Uncontested Issues
		i. Corporate Capital Planning
		ii. Distributional Equity Analysis
		iii. Review of plant investment
		iv. Power costs
		v. Low-income issues
		vi. Colstrip Tracker and Decommissioning and Remediation Costs
		vii. Gas Line Extension Margin Allowances
		viii. Time Varying Rates Pilot
		ix. Other, undisputed adjustments
III.		GREEN DIRECT SETTLEMENT
IV.		TACOMA LNG SETTLEMENT
	A.	Overview of the Tacoma LNG Settlement
	B.	Summary of the parties' testimony in support of, and in opposition to, the Tacoma
	LNC	G Settlement
		i. Prudency
		ii. Equity and environmental health
FIN	DIN	GS OF FACT
CON	NCLU	USIONS OF LAW135
ORI	DER	

### DOCKETS UE-220066, UG-220067, & UG-210918 (Consolidated) FINAL ORDER 24/10

PAGE 84

# vii. Gas Line Extension Margin Allowances

- 285 Line extension allowances are ratepayer-funded subsidies that reduce the cost of extending new gas service lines to customers' homes.<sup>508</sup>
- 286 The Settling Parties agree that PSE will significantly reduce its gas line extension allowance in the first year of the MYRP by using a two-year timeframe rather than a seven-year timeframe for the net present value (NPV) methodology. The line extension allowance will decrease further in 2024 before it is eliminated entirely in 2025. This reflects a compromise between the Company's initial filing, which did not propose any further reductions, and the response testimony filed by the Joint Environmental Advocates, who advocated eliminating line extension allowances.<sup>509</sup>
- 287 The Revenue Requirement Settlement therefore requires PSE to submit tariff revisions reflecting the following:
  - a) effective by the time new building codes take effect in 2023, a gas line extension margin allowance, based on the NPV methodology using a two-year timeframe and updated inputs from this rate case;
  - b) by January 1, 2024, a gas line extension margin allowance based on the NPV methodology using a one-year timeframe and the same inputs used in 2023; and
  - c) by January 1, 2025, reducing the gas line extension margin allowance to zero.<sup>510</sup>
- 288 *Commission Determination.* We accept the Settling Parties' agreement to gradually reduce PSE's gas line extension allowances as consistent with public policy. This proceeding provides an appropriate opportunity to revisit this issue.
- 289 The Commission recently considered the issue of line extension allowances at its October 29, 2021, open meeting.<sup>511</sup> After considering various proposals, the Commission ordered the

<sup>&</sup>lt;sup>508</sup> Burgess, Exh. EAB-1T at 36:4-5.

<sup>&</sup>lt;sup>509</sup> See Burgess, Exh. EAB-1T at 46:17-47:9.

<sup>&</sup>lt;sup>510</sup> Revenue Requirement Settlement ¶ 49.

<sup>&</sup>lt;sup>511</sup> See In the Matter of Chair Danner's Motion to Consider Whether Natural Gas Utilities Should Continue to Use the Perpetual Net Present Value Methodology, Docket UG-210729, Order 01 (October 29, 2021).

### DOCKETS UE-220066, UG-220067, & UG-210918 (Consolidated) FINAL ORDER 24/10

### PAGE 85

investor-owned gas companies to adopt a NPV methodology using a seven-year timeline.<sup>512</sup> Noting the urgent issue of climate change, the Commission described its decision as an "interim measure" and planned to continue its dialog with regulated utilities and interested parties.<sup>513</sup> On November 17, 2021, PSE filed revised tariff sheets reducing its line extension allowance from \$4,328 to \$1,997, consistent with the Commission's order.

290 Although PSE did not directly address the issue of line extension allowances in its initial filing, this issue was raised by the Joint Environmental Advocates in response testimony.<sup>514</sup> The Revenue Requirement Settlement reflects the Settling Parties' subsequent agreement to gradually reduce PSE's line extension allowance to zero, much as recommended by the Joint Environmental Advocates.<sup>515</sup> We accept the Settling Parties' agreement as lawful, supported by an appropriate record, and consistent with the public interest.

viii. Time Varying Rates Pilot

- 291 Time Varying Rates (TVR) are designed to lower peak demand and lower system costs by providing pricing signals that encourage customers to reduce usage during periods of peak demand.<sup>516</sup> TVR rates are designed to be revenue neutral.<sup>517</sup> The Settling Parties agree that PSE will carry out the TVR pilot proposed in its initial filing, subject to certain modifications.
- <sup>292</sup> In PSE's initial filing, consultant Ahmad Faruqui explains how PSE developed its Time Varying Rates (TVR) pilot in order to test revenue-neutral Time of Use (TOU) rates, peaktime rebates (PTRs), and TOU rates focused on customers with electric vehicles.<sup>518</sup> PSE will offer the TVR pilot to customers who are selected randomly,<sup>519</sup> and the customers may then opt-in.<sup>520</sup> PSE plans to run the pilot for a two-year period,<sup>521</sup> and will evaluate the success of the pilot in light of certain metrics.<sup>522</sup> Faruqui explains that the Company is not planning to

- <sup>514</sup> See, e.g., Burgess, EAB-1T at 7:6-12:21.
- <sup>515</sup> Revenue Requirement Settlement ¶ 49.
- <sup>516</sup> Faruqui, Exh. AF-1T at 2:11-14.
- <sup>517</sup> Faruqui, Exh. AF-1T at 16:19.
- <sup>518</sup> See generally Faruqui, Exh. AF-1T.
- <sup>519</sup> Faruqui, Exh. AF-1T at 25:3-4.
- <sup>520</sup> Faruqui, Exh. AF-1T at 24:8.
- <sup>521</sup> Faruqui, Exh. AF-1T at 27:18-28:4.
- <sup>522</sup> *E.g.*, Faruqui, Exh. AF-1T at 30:11-22.

<sup>&</sup>lt;sup>512</sup> *Id.*  $\P$  24.

<sup>&</sup>lt;sup>513</sup> *Id.* ¶ 27.

# DOCKETS UE-220066, UG-220067, & UG-210918 (Consolidated) PAGE 140 FINAL ORDER 24/10 PAGE 140

514 (8) The Commission retains jurisdiction over the subject matters and parties to this proceeding to effectuate the terms of this Order.

DATED at Lacey, Washington, and effective December 22, 2022.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chair

ANN E. RENDAHL, Commissioner

MILTON H. DOUMIT, Commissioner

Original Sheet 15

AVISTA CORPORATION dba Avista Utilities

## RULE NO. 15

### GAS MAIN EXTENSIONS

Extensions of gas distribution mains exclusive of meters, regulators and service lines, necessary to furnish permanent gas service to applicants, will be made by the Company in accordance with the following provisions:

A. General

The Company will construct, own, operate and maintain gas distribution main extensions only along public streets, roads and highways which the Company has the legal right to occupy, and on public lands and private property across which rights-of-way satisfactory to the Company may be obtained without cost to the Company.

- B. Extensions to Individual Applicants
  - 1. Free Extension

Gas main extensions will be made by the Company, provided the estimated total cost of the required extension from existing distribution mains to the premises to be served does not exceed three (3) times the estimated annual gross revenue as determined by the Company to be derived from bonafide applicants for such service; provided, however, that the request for service shall be of such permanence as to warrant the expenditure involved.

- 2. Extension Beyond Free Length
  - a. An extension where the estimated cost is more than three (3) times the estimated annual gross revenue shall be constructed by the Company upon fulfillment of the following conditions:
    - (1) The execution of a main extension agreement.
    - (2) The applicant or group of applicants shall advance in cash to the Company an amount equal to the difference between the cost of the extension and three (3) times the estimated annual gross revenue times the number of applicants.

(continued)

Advice No. 08-02-G Issued March 31, 2008 Effective For Service On & After April 1, 2008

P.U.C. OR. No.	5
----------------	---

Original Sheet 15A

AVISTA CORPORATION dba Avista Utilities

		RULE NO. 15 (continued)
		GAS MAIN EXTENSIONS
	b.	Upon completion of an extension, where an advance is made based on the estimated cost thereof, said advance will be adjusted only where the actual cost is found to be less than the estimated cost.
	С.	The amount advanced hereunder will be subject to refund, without interest, as provided for in Section B.3.
3.	Metho	od of Refund
		mount advanced in accordance with Section B.2. will be subject to d in the following manner:
	а.	A refund will be made for each additional customer connected to an extension for which all advance payments have not been refunded, equal to the amount by which three (3) times the estimated annual revenue exceeds the cost of a construction to serve such additional customer. Where there is a series of extensions, on any of which an advance is still refundable, and the Company makes succeeding free extensions with excess allowances (three (3) times the estimated annual revenue times the number of applicants less the cost of construction to serve), refunds will be made to repay in turn each of such advances which remain refundable beginning with the first series from the original point of supply. When two or more parties make a joint advance on the same extension, refundable amounts will be distributed to these parties in the same proportion as their individual advances bear to the total joint advance.
	b.	No refunds will be made by the Company on advances, or portions thereof, covering extensions which have been in service more than five (5) years.
	C.	Any assignment by a customer of his interest in any part of a cash advance made as above which at the time remains unrefunded, must be made in writing and endorsed by the Company showing the amount still unrefunded, and a copy of such assignment bearing the signature of both the assignor and assignee must be filed with the Company before it shall be effective and binding upon the Company.
		(continued)
Advice No. Issued		GEffective For Service On & After31, 2008April 1, 2008
		-

State & Federal Regulation

Original Sheet 15B

AVISTA CORPORATION dba Avista Utilities

		RULE NO. 15 (continued)	
		GAS MAIN EXTENSIONS	
	d.	Any portion of the cash advance which shal possession of the Company after the termin above provided for shall become the proper	nation of the refunds as
C. Main I	Extensio	ons to Serve Subdivisions	
1.	Advar	ces	
	a.	Gas distribution main extensions to and with constructed, owned and maintained by the applications for service by ultimate users or estimated cost of such extensions is advance however, the payment of the portion of such Company estimates would be refunded with other provisions of this extension rule shall months if the subdivider-builder furnishes to that he had received state and local authori promptly with construction and that he has a provided further that the subdivider-builder contract for the extension, to pay immediate months all amounts not previously advance refundable. At the end of such six-month p shall collect all such amounts not previously then refundable.	Company in advance of ally when the entire ced to the Company; advance as the anin six months under be postponed for six the Company evidence zations to proceed adequate financing, and agrees in writing, in his ely at the end of six d which are not then period, the Company
	b.	The amount advanced will be subject to reference provided in Section C.2., provided, however, made by the Company in excess of the amount company and further provided that no repart the Company after a period of five (5) years completion of the extension on which the advanced sectors and the company after a period of sectors and the advanced sectors are sectors and the extension of the extension of the advanced sectors are sectors.	r, no repayment will be ount advanced to the yments will be made by a from the date of
2.	Metho	d of Refund	
	а.	Refunds as tabulated hereunder for such permay be directly connected to such an extensixty (60) days after the date of first	
		(continued)	
		-	
Advice No. Issued		G Effectiv 31, 2008 April 1,	ve For Service On & After 2008

P.U.C. OR. No. 5	Original Sheet 15C		
	CORPORATION vista Utilities		
	RULE NO. 15 (continued)		
	GAS MAIN EXTENSIONS		
servic	e or as soon thereafter as practicable on the following basis:		
(1)	Each main extension built to serve a subdivision shall serve a		
	defined number of lots.		
(2)	When any individual lot shall have a permanent and complete building constructed thereon, occupied by one of the Company's bonafide customers, the Company will refund that portion of the sum advanced which bears the same relation to the sum advanced as one lot bears to the total number of lots in the subdivision.		
(3)	Should a connection for service be made to the main extension other than to serve one of the lots determined in accordance with Section C.2.a.(1) above, then the refund provisions of Section B.3.a. will apply.		
(4)	When <u>multi-family</u> dwelling units are included within a subdivision, the refund for these units will be provided as follows:		
	(a) The first occupied apartment in each multi-family unit will qualify for a refund as if it were one lot, on the basis described in Section C.2.a.(2) above. Each remaining apartment, within that unit, as occupied thereafter would quality for a refund of 25% of that amount.		
	(b) After full occupancy, the refund that would be due for the number of lots upon which the multi-family units are constructed will be made. Refunds in excess of the number of lots may be made provided the total amount advanced for the subdivision is not exceeded.		
D. Extensions for Temp	oorary or Speculative Business		
Extensions for temporter temporary service ru	orary service or speculative business will be made under the lle.		
	(continued)		
Advice No. 08-02-G Issued March 31, 200	Effective For Service On & After April 1, 2008		

State & Federal Regulation

Original Sheet 15D

AVISTA CORPORATION dba Avista Utilities

RULE NO.	15	(continued)
----------	----	-------------

GAS MAIN EXTENSIONS

E. Exceptional Cases

If adherence to these rules should be deemed impractical or impossible by either party, the Company or the applicant, prior to commencing construction or installation, may petition the Commission for a special ruling or for the approval of special conditions that have been mutually agreed upon.

Advice No. 08-02-G Issued March 31, 2008

Issued by Avista Utilities By Kelly Norwood, Vice President, EG\_DR\_014 Attachment A Effective For Service On & After April 1, 2008

Original Sheet 16

### AVISTA CORPORATION dba Avista Utilities

### RULE NO. 16

### SERVICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES

Extensions of gas distribution service pipes necessary to furnish permanent gas service to applicants, and installation of facilities on customers' premises will be in accordance with the following:

- A. Service Pipes for Residential and General Service
  - Upon application, the Company will furnish and install at its own expense a 1. service pipe of suitable capacity from its gas main to the property line of property abutting upon any public street, highway, alley, lane or road along which it already has or will install street mains, and will install, at its own expense, a further extension of 40 feet on the private property, or as much of such extension as may be necessary to reach a meter location that is satisfactory to the Company. The Company will install that portion of each service pipe in excess of the portion installed at the Company's expense inside of the property line, subject to an advance to be paid by the applicant as set forth below. 2. In cases where the applicants' building is located a considerable distance from the main, or where service is taken off a high pressure transmission main, or where a hazard or obstruction such as plowed land between the gas main and the applicant's building prevents the Company from prudently installing a
    - service pipe, the Company may, at its discretion, waive the above. In such cases, the meter may be located at or near the applicant's property line, as close as practical to the Company's main at a location agreed upon by the customer. Where these conditions exist, the Company will install, at its own expense, service pipe only to the meter location.
    - 3. Service Pipes Exceeding the Free Length When the length of service pipe on the applicant's premises, necessary to reach the approved meter location, exceeds the free allowance as stated above, the applicant will have the following options:
      - a) Pay the Company for the installed cost of the excess length of service pipe; or
      - b) Provide "in-kind" services (e.g., ditching, labor, etc.) that are equal to or greater than the value of the installed cost of the excess length of service pipe; or
      - c) Use a combination of items a) and b) above.

If the customer chooses Option b) or c),above, the Company's total gas-service installation cost shall not exceed the original cost of installing the gas service from the gas main to the customer's property line, plus a further extension of 40 feet onto the customer's private property, as described in paragraph A.1. above. (continued)

Advice No. 08-02-G Issued March 31, 2008 Effective For Service On & After April 1, 2008

Issued by Avista Utilities

By Kelly O. Norwood, Vice President, State and Federal Regulation

Original Sheet 16A

# AVISTA CORPORATION dba Avista Utilities

		RULE NO. 16 (cor	ntinued)	
	SERVI	ICE CONNECTIONS AND FACILITIES	S ON CUSTOMERS' PREMISES	
В.	Servic	ce Pipes for Firm Industrial and Interru	uptible Service	
	servic servic		eet for firm industrial and interruptible of required investment for mains and the rule governing main extensions to	
C.	One S	Service Pipe for a Single Premises		
	1.	premises, unless it is for the convent requests an additional service pipe a unreasonable burden would be place service pipe were denied. When an	additional service pipe is installed ant's request, the applicant will pay the	
	2.		divided into separate premises, with ed to other than the applicant or the right, upon written notice, to on or liability. Gas service, as required e re-established in accordance with the	
D.	Branc	h Service Pipe		
	premi Comp	ses, the Company will install a branch	ent customers on the same or adjoining a service pipe at the option of the ate property under the conditions as set	
E.	Reloc	ation of Service Pipes		
	1.	When in the judgement of the Comp including metering facilities, is neces maintenance of adequate service or	ssary and is due either to the	
		(continued)	Ι	
Advic Issue		08-02-G March 31, 2008	Effective For Service On & After April 1, 2008	
Issued by	v Avis	ta Utilities		

By Kelly O. Norwood, Vice President, State and Federal Regulation

P.U.C. OR. No	o. 5 Original Sheet	16B	
	AVISTA CORPORATION dba Avista Utilities		
	RULE NO. 16 (continued)		
SER	RVICE CONNECTIONS AND FACILITIES ON CUS	STOMERS' PREMISES	
	convenience of the Company, the Company w own expense.	ill perform such work at its	
2.	If relocation of service pipe is due solely to me applicant or the customer, or is made necessa which create hazards or which make the mete relocation, including metering facilities, will be at the expense of the applicant or the custome	ry by acts of the customer r inaccessible, such performed by the Company	
F. Star	ndby Use		
No a only	allowance will be made for equipment used for sta y.	ndby or emergency purposes	
G. Oth	G. Other Types of Service Pipes		
Where an applicant or customer requests another type of service pipe such as stub service pipes, or service from transmission mains, the Company will consider each such request and will grant an allowance equivalent to 40 feet of standard service pipe.			
H. Ger	neral		
1.	The applicant or customer shall not attempt to Company's main, service pipe or meter, nor sh turn on, or move or adjust any of the Company	all he connect, disconnect,	
	Only duly authorized employees or other perso the Company are permitted to perform work of Company seal. The Company shall not be res or otherwise for injury to person or property ca of its facilities on the customers' premises by h	this nature or to break a ponsible or liable in damages used by the unauthorized use	
2.	For each gas service pipe installed or reconstr include a suitable shutoff valve, located so as outside of the structure served and between sa main from which the service pipe is supplied.	to be accessible at all times,	
	(continued)	Ι	
Advice No. Issued	08-02-G Effective March 31, 2008 April 1, 2	For Service On & After 008	

Issued by Avista Utilities

By Kelly O. Norwood, Vice President, State and Federal Regulation

Original Sheet 16C

### AVISTA CORPORATION dba Avista Utilities

### RULE NO. 16 (continued)

### SERVICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES

- 3. The Company at its expense will provide, install, own and maintain a suitable meter.
- I. Location of Meter, Protection and Service Facilities
  - 1. Meters normally will be located above ground adjacent to the building and as near as practicable to the distribution main from which the service pipe is extended. Meters will be placed at locations satisfactory to the Company. Such meters will be situated so as to be accessible at all times, for inspection, reading, testing, etc. The Company will install adequate protection around meters in Company approved locations when, in the Company's judgment, such measures are necessary for safety. The customer shall protect meters and other property supplied by the Company from damage or theft. The applicant or customer shall be responsible for installing his piping to the point of delivery. If the Customer requests a different meter location that requires the installation of adequate protection, the Company will install the protection at the Customer's expense. If, in the Company's judgment, meters or other property are not accessible or safe because of customer improvements at the Premise, or because of hazardous or potentially hazardous conditions or other actions of the customer, the Company may move or relocate the meter or other property at the customer's expense.
  - 2. Where separate meters are installed to measure gas supplied to customers such as tenants in commercial buildings or multi-family dwellings, the meters normally will be located at some central point at the ground level; except that where a central location is impractical meters may be placed at any other points satisfactory to the Company. It shall be the responsibility of the property owner to identify his piping so as to indicate the particular location to be served by each meter.
- J. Customer Facilities
  - 1. The customer shall, at his own risk and expense, furnish, install and keep in good and safe condition all regulators, gas piping, appliances, fixtures, and apparatus, of any kind or character, which may be required for receiving gas from the Company and for applying and utilizing such gas beyond the point of delivery, including all necessary protective appliances and suitable housing therefor. The customer shall not connect to his gas facilities any piping, equipment, or apparatus in such a manner as could cause a reversal of gas flow in the Company's facilities.

		(continued)		1	
Advice No. Issued	08-02-G March 31, 2008		Effective For S April 1, 2008	Service On & After	
				Service On & After	

Issued by Avista Utilities

By Kelly O. Norwood, Vice President, State and Federal Regulation

P.U.C. OR. No. 5	Original Sheet 16D
	AVISTA CORPORATION dba Avista Utilities
	RULE NO. 16 (continued)
SERV	/ICE CONNECTIONS AND FACILITIES ON CUSTOMERS' PREMISES
2.	The customer shall be responsible for any loss or damage to the Company and its property, and shall indemnify the Company against any loss, liability, claim, injury, or damage to any person or property, occasioned or caused by the negligence, omission, or wrongful act of the customer or any of his agents, employees, licensees, or other persons in installing, maintaining, using, operating, repairing, or removing such gas piping, gas appliances, and other equipment or facilities of any kind which are situated beyond the point of delivery.
K. Owner	ship
1.	All meters, regulators, service pipes, and other facilities installed at the Company's expense, or with contributions or customer advances, located either wholly or partially upon the customer's premises will at all times be and remain the property of the Company.
2.	When a meter and/or service facilities are installed by mutual consent on private property other than the applicant's the applicant will first secure, without cost to the Company, an easement for such installation satisfactory to the Company.
L. Mainte	enance
1.	The Company will exercise reasonable care to operate and maintain in a safe, efficient and proper condition all of its facilities used in connection with the regulation, measurement, and delivery of gas to any customer.
	All such facilities may be repaired, replaced, removed or abandoned by the Company at any time as operating conditions necessitate. Normally such facilities will not be subject to removal or abandonment except when:
	a. Service to the customer is terminated.
	b. The customer fails to comply with the Company's rules or other provisions of its tariff schedules.
	c. Hazardous or unsafe conditions exist.
	(continued)
Advice No. Issued	08-02-G Effective For Service On & After March 31, 2008 April 1, 2008

Revised First Revision Sheet 16E cancelling Original Sheet 16E

P.U.C. OR. No. 5

# AVISTA CORPORATION dba Avista Utilities

		RULE NO. 16 (	continued)								
	SERVI	CE CONNECTIONS AND FACILI	TIES ON CUSTON	MERS' PREMISES							
	<ol> <li>The customer shall exercise reasonable care to prevent the meters, regulators, service pipes and other facilities of the Company, located on the customer's premises, from being damaged, or destroyed, and shall not tamper with them or permit debris, refuse or other obstacles to accumulate in and around the meter location so that access to the meter becomes difficult or unsafe. The customer shall not ground electrical appliances or otherwise make electrical connections to the Company's gas facilities. In case any defect in the Company's facilities is discovered, the customer shall promptly notify the Company thereof.</li> <li>No rent or charge whatsoever will be paid by the Company for placing or</li> </ol>										
	3.	No rent or charge whatsoever wil maintaining said meters, regulate the customer's premises.									
М.	Right	of Access									
	custor with th	ompany will at all times have the r ner's premises at all reasonable ho ne furnishing or termination of gas secured to it by law or by these tai	ours for any purpo service and the ex	se reasonably connected							
N.	Excep	tional Cases									
	unjust mattei	isual circumstances, when the app to either party, the Company, the to the Commission for special ruli may be mutually agreed upon, priving the provide the terms of the terms of the terms of the terms of the terms of the terms of term	applicant, or the c ing or for the appre	ustomer will refer the oval of special conditions							
	lvice No			or Service On & After							
	sued	August 18, 2009	Se	otember 9, 2009							
Issued b	v Avist	a Utilities									

(D)

JURISDICTION:	Oregon	DATE PREPARED:	5/11/2023
CASE NO.:	UG 461	WITNESS:	Joseph Miller
<b>REQUESTER:</b>	CUB	<b>RESPONDER:</b>	Joe Miller
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	CUB – 001 Supplemental	TELEPHONE:	(509) 495-4546
		EMAIL:	joe.miller@avistacorp.com

# **REQUEST:**

Refer to Avista's Tariff Rule No. 15, which states in Section B "Extensions to Individual Applicants", "Gas main extensions will be made by the Company, provided the estimated total cost of the required extension from existing distribution mains to the premises to be served does not exceed three (3) times the estimated annual gross revenue as determined by the Company..." a) Please clarify what an "Individual Applicant" is.

b) Would a developer building multiple dwellings ever be considered an individual applicant?

c) For residential customers, please provide a narrative explanation of how Avista calculates "three (3) times the estimated annual gross revenue"? Please detail how Avista estimates annual gross revenue for a new customer connection. Is Avista's estimation dependent on the types of natural gas appliance that is going to be installed at the location?

d) Please provide documentation from the OPUC docket that approved Avista's Rule 15 incumbent methodology, including Company Testimony, workpapers and filings.

e) Please provide four sample calculations, workbooks, or workorders that detail "three (3) times the estimated annual gross revenue" from December 2022- March 2023 in Oregon. The sample should detail:

a. All asset classes used in furnishing the extension.

b. The cost of said materials, capitalized labor, and the total residential line extension costs.

c. For each type of asset class listed, please provide the book like and salvage value as approved by the Commission in the Company's most recently approved deprecation study.

### **RESPONSE:**

- a) An Individual Applicant is a prospective new customer making application for an extension of permanent service.
- b) No
- c) Avista's CPCs (Construction Project Coordinators) use an estimation tool based on the expected installed equipment to guide the calculation of the total main extension allowance for residential customers. Please refer to the CUB\_DR\_001 Attachment A for the gas allowance calculation sheet used by the Company's CPC's to determine the main extension allowance for prospective new customers.
- d) The Company purchased the Oregon jurisdiction from CP National in 1991. Rules 15 was approved during the time CP National owned the Oregon jurisdiction and Avista has maintained these tariffs since that time. Therefore, the Company is unable to provide documentation, testimony and/or workpapers supporting the approval of the rule as requested.

e) Main extensions for residential customers are extremely rare. Typically line extensions for residential customers consist of a service line which fall under Rule 16. As such, the Company has not experienced any residential main extensions in the time period requested.

## SUPPLEMENTAL RESPONSE:

See the attachments labeled CUB\_DR\_001 Supplemental Attachment B detailing a recent main extension estimated cost, and allowance calculation, for a residential development in Oregon. Under the Company's most recently approved depreciation study the book life rate and salvage value percentage of distribution main is 1.89% (survivor curve 60-R3) and -23% respectively.<sup>1</sup> Please note, under the Company's proposed depreciation study the book life rate and salvage value percentage of distribution main is 2.11% (survivor curve 55-R3) and -20% respectively.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Per Order 18 451, Attachment A, Page 33.

<sup>&</sup>lt;sup>2</sup> UM 2277, Attachment C, Page 66.

Av	vista "Esti	ma	ated Annua	I Revenue"	Calculation	าร	
	For F	Res	sidential M	ain Extensi	ons		
Change the POL		hore	and the Spree	dsheet will calcula	ata Allowanaa fa	Main	Extension
				ne on potiential N		Iviali	LATENSION
Bas				Avista Tarriff, Rul		В	
			5 11	,	- ,		
Customers	Name	-					
Address:							
City				1 1	Phone #		
SPACE HEAT	ING						
			Current	Annual	3 Year		Main Ext
Sq Ft of House	X T/SqFt/Yr	Х	410 Rate	Revenue	Revenue		Allowance
0	X 0.366	Х	\$0.000000	\$0.00	\$0.00		\$0.00
Manthly Mate	r Charge			A	0.1/2.27		
Monthly Mete # of Meters	Months/Yr		Monthly Charge	Annual	3 Year		
# of Meters	Months/Yr 12		Monthly Charge \$0.00	Revenue \$0	Revenue \$0		\$0
•	12		ψ0.00	ΨΟ	ψυ		Ψ
WATER HEAT	ING						
No. of Dooplo	Therms		Current	Annual	3 Year		
No. of People in Residence	X Per Person	X	410 Rate	Revenue	Revenue		
III I Lesiderice		^	4101\ate	Revenue	Revenue		
0	X 150	Х	\$0.000000	\$0.00	\$0.00		\$0.0
COOKING / L	AUNDRY						
1 <b>f</b> A II	<b>T</b> 1		440 Data	Annual	3 Year		
No. of Appliances	Therms 36		410 Rate \$0.000000	Revenue \$0.00	Revenue \$0.00		\$0.00
0	36		\$0.000000	\$0.00	\$0.00		\$0.00
			<b>\$0.000000</b>	<b>\$0.00</b>	<b>0.00</b>		<b>V</b> 0.00
FIREPLACE H	IEATERS						
as Secondary He	at Source						
				Annual	3 Year		
Sq Ft of House	T/Sq Ft/Yr		410 Rate	Revenue	Revenue		
0	0.19		\$0.000000	\$0.000000	\$0.00		\$0.00
as Primary Heat \$	Source	-					
		-		Annual	3 Year		
Sq Ft of House	T/Sq Ft/Yr	1	410 Rate	Revenue	Revenue		
0	0.366		\$0.000000	\$0.000000	\$0.00		\$0.00
		JN.	IHS USAGE	,	0.)(		
la of Appliances	Therms		410 Rate	Annual	3 Year		
No. of Appliances	200		\$0.000000	Revenue \$0.00	Revenue \$0.00		\$0.00
• • •	200		φ0.000000	ψ0.00	ψ0.00		ψ0.00
SPAS/HOT TU	JBS (YEAR	RC	UND USAGE	Ξ)			
				Annual	3 Year		
lo. of Appliances	Therms		410 Rate	Revenue	Revenue		
0	150		\$0.000000	\$0.00	\$0.00		\$0.00
MISC	BBQ / GA	51	IGHTS				
	DDQ/GA						
		-		Grand TO			¢0.0
	1			Grand TO	IAL		\$0.0

JURISDICTION:OregonCASE NO.:UG 461REQUESTER:CUBTYPE:Data RequestREQUEST NO.:CUB - 002

DATE PREPARED:4/13/2022WITNESS:Joe MillerRESPONDER:Joe MillerDEPT:RegulatoryTELEPHONE:(509) 495-EMAIL:joe.miller(

Joe Miller Joe Miller Regulatory Affairs (509) 495-4546 joe.miller@avistacorp.com

# **REQUEST:**

Refer to Avista's Tariff Rule No. 16, which states "Upon application, the Company will furnish and install at its own expense a service pipe of suitable capacity from its gas main to the property line of property abutting upon any public street, highway, alley, lane or road along which it already has or will install street mains, and will install, at its own expense, a further extension of 40 feet on the private property...".

a) Please provide a narrative explanation of the economic justification for installing up to 40 feet of pipe to connect customers to the gas main at the Company's expense.

b) Please provide the OPUC proceeding which established the 40 feet of service pipe limit.

c) Please provide the average length of pipe that Avista installs to connect new residential customers to their system in 2021 and 2022.

# **RESPONSE:**

The Company purchased the Oregon jurisdiction from CP National in 1991. Rules 16 was approved during the time CP National owned the Oregon jurisdiction and Avista has maintained these tariffs since that time. Therefore, the Company is unable to provide documentation supporting the economic justification or OPUC proceeding which established the up to 40 feet of service pipe condition.

The average length of total service pipe that Avista installed to connect new residential customers to the system in 2021 and 2022 is approximately 52 and 62 feet respectively. This footage is inclusive of the service pipe from the gas main to the property line and any additional footage onto the private property as prescribed within Rule 16.

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 013

DATE PREPARED:05/15/2023WITNESS:Jeff WebbRESPONDER:Paul GoodDEPT:Natural GasTELEPHONE:(208) 769-1EMAIL:Paul.Good(a)

Jeff Webb Paul Good Natural Gas Delivery (208) 769-1368 Paul.Good@avistacorp.com

### **REQUEST:**

What is the range in total costs that Avista incurred to build a new service line to connect a new residence to gas utility service between January 1, 2022 through May 2, 2023?

### **RESPONSE:**

The cost to install a new service line to connect a new residence ranged from \$735.68 to \$17,828.56.

JURISDICTION:	Oregon	DATE PREPARED	: 03/30/2023
CASE NO:	UG 461	WITNESS:	Tia Benjamin
<b>REQUESTER:</b>	PUC Staff	<b>RESPONDER:</b>	Patrick Ehrbar
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	Staff-184	TELEPHONE:	(509) 495-8620
		EMAIL:	patrick.ehrbar@avistacorp.com

### **REQUEST:**

Please provide the Company's expected useful life for the components of line extensions and respond to the following:

- a. Does the useful life vary by census block? If so, please provide a narrative explanation for the variance and provide the useful life grouped by census block.
- b. If the difference in useful life between census blocks is due to the materials used in the line extension, please explain why materials vary across the Company's service territory.

### **RESPONSE:**

Please see Staff\_DR\_184 Attachment A for the expected useful lives requested, specifically FERC Accounts 380 and 381 on page 13.

a. Depreciable lives are system based, as the lives associated with these plant assets in particular would not be greater or lesser, on average, in different census tracts. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities. A depreciation study is not conducted on a more granular basis, such as census block by census block.

b. n/a

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
ELECTR	IC PLANT										
STEAM	PRODUCTION PLANT										
310.30	REMOVING OTHER PROPERTY										
010.00	KETTLE FALLS	12-2038	SQUARE	*	0	138,174.50	125,750	12,424	731	0.53	17.0
310.40	EASEMENTS, PERMITS KETTLE FALLS	12-2038	SQUARE	*	0	289,111.15	13,891	275,220	16,190	5.60	17.0
311.00	STRUCTURES AND IMPROVEMENTS										
011.00	KETTLE FALLS	12-2038	75-S1.5	*	(5)	25,288,272.19	20,848,866	5,703,820	348,470	1.38	16.4
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	75-S1.5	*	(3)	20,152,736.08	17,033,081	3,724,237	628,559	3.12	5.9
	COLSTRIP 3 AND COMMON - WASHINGTON	12-2025	75-S1.5	*	(3)	38,012,944.07	33,399,934	5,753,398	1,449,596	3.81	4.0
	COLSTRIP 4 - IDAHO	12-2027	75-S1.5	*	(4)	18,776,415.30	16,470,119	3,057,353	516,203	2.75	5.9
	COLSTRIP 4 - WASHINGTON	12-2025	75-S1.5	*	(4)	35,416,973.94	31,014,115	5,819,538	1,467,440	4.14	4.0
	TOTAL ACCOUNT 311.00					137,647,341.58	118,766,116	24,058,346	4,410,268	3.20	
311.10	STRUCTURES AND IMPROVEMENTS - LANDFILL KETTLE FALLS	12-2038	55-S3	*	0	3,648,851.16	3,038,704	610,147	38,406	1.05	15.9
312.00	BOILER PLANT EQUIPMENT										
012.00	KETTLE FALLS	12-2038	55-R1	*	(5)	46,801,685.60	30,014,114	19,127,656	1,228,371	2.62	15.6
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	55-R1	*	(3)	30,424,801.13	24,656,421	6,681,124	1,145,757	3.77	5.8
	COLSTRIP 3 AND COMMON - WASHINGTON	12-2025	55-R1	*	(3)	55,960,862.78	48,277,491	9,362,198	2,382,606	4.26	3.9
	COLSTRIP 4 - IDAHO	12-2027	55-R1	*	(4)	21,565,585.25	15,930,270	6,497,938	1,110,174	5.15	5.9
	COLSTRIP 4 - WASHINGTON	12-2025	55-R1	*	(4)	39,391,891.53	29,725,202	11,242,365	2,857,319	7.25	3.9
	TOTAL ACCOUNT 312.00					194,144,826.29	148,603,498	52,911,281	8,724,227	4.49	
313.00	ENGINES AND ENGINE-DRIVEN GENERATORS										
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	50-R2.5		(3)	175,460.65	12,394	168,331	28,150	16.04	6.0
	COLSTRIP 3 AND COMMON - WASHINGTON COLSTRIP 4 - IDAHO	12-2025 12-2027	50-R2.5 50-R2.5	*	(3) (4)	333,122.65 11,394.29	37,119 7,824	305,997 4,026	76,692 673	23.02 5.91	4.0 6.0
	COLSTRIP 4 - IDAHO COLSTRIP 4 - WASHINGTON	12-2027	50-R2.5 50-R2.5	*	(4)	21,082.72	26,479	(4,553)	0/3	5.91	- 6.0
	TOTAL ACCOUNT 313.00					541,060.31	83,816	473,801	105,515	19.50	
314.00	TURBOGENERATORS										
014.00	KETTLE FALLS	12-2038	37-R0.5	*	(5)	18,632,088.90	12,184,298	7,379,396	519,785	2.79	14.2
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	37-R0.5	*	(3)	8,330,808.18	6,553,849	2,026,883	357,021	4.29	5.7
	COLSTRIP 3 AND COMMON - WASHINGTON	12-2025	37-R0.5	*	(3)	15,714,353.74	11,703,630	4,482,154	1,166,375	7.42	3.8
	COLSTRIP 4 - IDAHO	12-2027	37-R0.5	*	(4)	6,018,100.91	3,693,446	2,565,379	451,000	7.49	5.7
	COLSTRIP 4 - WASHINGTON	12-2025	37-R0.5	*	(4)	11,361,051.53	6,781,484	5,034,010	1,304,756	11.48	3.9
	TOTAL ACCOUNT 314.00					60,056,403.26	40,916,707	21,487,822	3,798,937	6.33	
315.00	ACCESSORY ELECTRIC EQUIPMENT										
	KETTLE FALLS	12-2038	50-S1	*	(5)	12,596,049.01	7,191,500	6,034,352	393,987	3.13	15.3
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	50-S1	*	(3)	3,875,940.31	2,994,762	997,457	171,477	4.42	5.8
	COLSTRIP 3 AND COMMON - WASHINGTON COLSTRIP 4 - IDAHO	12-2025	50-S1 50-S1	*	(3)	7,383,244.12	5,822,711	1,782,030 757,176	453,740	6.15 4.88	3.9
	COLSTRIP 4 - IDAHO COLSTRIP 4 - WASHINGTON	12-2027 12-2025	50-S1	*	(4) (4)	2,677,756.92 4,986,641.55	2,027,692 3,872,925	1,313,182	130,650 335,999	6.74	5.8 3.9
	TOTAL ACCOUNT 315.00					31,519,631.91	21,909,590	10,884,197	1,485,853	4.71	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT										
	KETTLE FALLS	12-2038	60-R2	*	(5)	2,476,959.19	2,016,977	583,830	37,593	1.52	15.5
	COLSTRIP 3 AND COMMON - IDAHO	12-2027	60-R2	*	(3)	3,492,590.38	3,046,999	550,369	93,305	2.67	5.9
	COLSTRIP 3 AND COMMON - WASHINGTON	12-2025	60-R2	*	(3)	6,589,238.92	5,622,305	1,164,611	294,747	4.47	4.0
	COLSTRIP 4 - IDAHO	12-2027	60-R2	*	(4)	1,574,284.71	1,370,875	266,381	45,390	2.88	5.9
	COLSTRIP 4 - WASHINGTON	12-2025	60-R2	*	(4)	2,968,698.76	2,518,314	569,133	144,458	4.87	3.9
	TOTAL ACCOUNT 316.00					17,101,771.96	14,575,471	3,134,324	615,493	3.60	
TOTAL	STEAM PRODUCTION PLANT					445,087,172.12	348,033,543	113,847,562	19,195,620	4.31	

		PROBABLE RETIREMENT	SURVIVIOR		NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC	CRUAL	COMPOSITE
	DEPRECIABLE GROUP (1)	DATE (2)	CURVE (3)		PERCENT (4)	DECEMBER 31, 2021 (5)	RESERVE (6)	ACCRUALS (7)	AMOUNT (8)	RATE (9)=(8)/(5)	LIFE (10)=(7)/(8)
		(-)	(-)		(1)	(-)	(-)	( )	(-)	(-) (-) (-)	(, (,
HYDRO	PRODUCTION PLANT										
330.10	ASSET AGREEMENT - SETTLEMENT										
	LITTLE FALLS	12-2059	50-SQ		0	4,200,000.00	2,107,100	2,092,900	83,394	1.99	25.1
330.30	REMOVING PROPERTY OF OTHERS										
	LITTLE FALLS	12-2059	100-R4	*	0	13,633.60	10,676	2,958	170	1.25	17.4
	LONG LAKE	12-2055	100-R4	*	0	171,079.55	109,434	61,645	2,296	1.34	26.8
	SPOKANE UPPER FALLS	12-2060	100-R4	*	0	63,563.76	54,920	8,644	541	0.85	16.0
	NINE MILE POST FALLS	12-2060 12-2060	100-R4 100-R4	*	0	9,936.75 23,166.89	7,747 16.851	2,190 6.316	58 320	0.58 1.38	37.8 19.7
	CABINET GORGE	12-2060	100-R4 100-R4	*	0	6,783,236.89	2,524,159	4,259,077	125,202	1.85	34.0
	NOXON RAPIDS	12-2072	100-R4	*	0	29,413,621.64	9,332,647	20,080,975	512,637	1.85	39.2
		12 2010	100 111		Ū						00.2
	TOTAL ACCOUNT 330.30					36,478,239.08	12,056,434	24,421,805	641,224	1.76	
330.31	TWIN CREEK CHANNEL RESTORATION CABINET GORGE	12-2072	100-R4		0	242,033.02	60,609	181,424	3,623	1.50	50.1
		12-2072	100-K4		0	242,033.02	60,609	101,424	3,623	1.50	50.1
330.40	LAND EASEMENTS	10.0055	00 7 1		0	· · · · · ·		-	-		
	LITTLE FALLS	12-2059	90-R4		0	3,626.67	3,627	0	0	-	-
	LONG LAKE NINE MILE	12-2055 12-2060	90-R4 90-R4	*	0	246,562.25 979.50	239,896 980	6,666 0	298 0	0.12	22.4
	POST FALLS	12-2060	90-R4 90-R4	*	0	2,708,437.11	1,684,647	1,023,791	28,210	1.04	36.3
	CABINET GORGE	12-2000	90-R4	*	0	365,924.35	165,075	200,850	7,563	2.07	26.6
	NOXON RAPIDS	12-2079	90-R4	*	õ	80,869.91	13,105	67,765	1,251	1.55	54.2
	TOTAL ACCOUNT 330.40					3,406,399.79	2,107,329	1,299,072	37,322	1.10	
330.41	LAND EASEMENTS - CONSERVATION - HABITAT										
000.11	CABINET GORGE	12-2072	90-R4	*	0	1,992,208.04	214,510	1,777,698	35,344	1.77	50.3
	NOXON RAPIDS	12-2079	90-R4	*	0	982,234.97	212,592	769,643	13,865	1.41	55.5
	TOTAL ACCOUNT 330.41					2,974,443.01	427,102	2,547,341	49,209	1.65	
331.00	STRUCTURES AND IMPROVEMENTS										
	MONROE STREET	12-2072	110-R1.5	*	(7)	8,198,986.35	1,831,747	6,941,168	149,638	1.83	46.4
	LITTLE FALLS	12-2059	110-R1.5	*	(5)	5,471,929.54	1,140,980	4,604,546	126,940	2.32	36.3
	LONG LAKE	12-2055	110-R1.5	*	(6)	7,686,252.01	1,466,588	6,680,839	206,700	2.69	32.3
	SPOKANE UPPER FALLS	12-2060	110-R1.5	*	(6)	1,114,579.61	535,115	646,339	17,502	1.57	36.9
	NINE MILE	12-2060	110-R1.5		(4)	20,049,059.52	2,189,911	18,661,111	502,464	2.51	37.1
	POST FALLS	12-2060	110-R1.5	*	(4)	6,751,666.16 23,434,868.70	899,754	6,121,978	164,159	2.43	37.3
	CABINET GORGE NOXON RAPIDS	12-2072 12-2079	110-R1.5 110-R1.5	*	(13) (21)	23,434,868.70 21,487,759.85	5,716,415 5,899,734	20,764,986 20,100,455	446,484 391,349	1.91 1.82	46.5 51.4
	TOTAL ACCOUNT 331.00					94,195,101.74	19,680,245	84,521,422	2,005,236	2.13	
331.10	STRUCTURES AND IMPROVEMENTS - FISH AND WILDLIFE CONS					- ,,	,	,,	_,,		
331.10	LONG LAKE	12-2055	55-S2.5	*	(6)	66,378.33	64,914	5,447	205	0.31	26.6
	POST FALLS	12-2055	55-S2.5	*	(4)	6,181.09	2,673	3,756	101	1.63	37.2
	CABINET GORGE	12-2072	55-S2.5	*	(13)	31,650.07	11,620	24,144	616	1.95	39.2
	NOXON RAPIDS	12-2079	55-S2.5	*	(21)	1,090,121.07	115,486	1,203,561	26,836	2.46	44.8
	TOTAL ACCOUNT 331.10					1,194,330.56	194,693	1,236,908	27,758	2.32	
331.20	STRUCTURES AND IMPROVEMENTS - RECREATION										
	MONROE STREET	12-2072	50-R2.5	*	(7)	4,037,024.94	660,395	3,659,222	96,265	2.38	38.0
	LONG LAKE	12-2055	50-R2.5	*	(6)	1,720,681.91	398,598	1,425,325	46,217	2.69	30.8
	SPOKANE UPPER FALLS	12-2060	50-R2.5	*	(6)	5,979.70	6,401	(62)	0	-	
	NINE MILE	12-2060	50-R2.5	*	(4)	370,751.66	84,116	301,466	8,664	2.34	34.8
	POST FALLS	12-2060	50-R2.5	*	(4)	901,178.74	142,194	795,032	23,316	2.59	34.1
	CABINET GORGE NOXON RAPIDS	12-2072 12-2079	50-R2.5 50-R2.5	*	(13) (21)	2,354,042.26 2,332,309.51	493,559 502,199	2,166,509 2,319,895	53,840 57,343	2.29 2.46	40.2 40.5
		12-2019	JU-N2.0		(21)	· <u> </u>					40.5
	TOTAL ACCOUNT 331.20					11,721,968.72	2,287,462	10,667,387	285,645	2.44	
331.26	STRUCTURES AND IMPROVEMENTS - RECREATION INFORMATIO			+	(46)				··-		
	CABINET GORGE NOXON RAPIDS	12-2072 12-2079	50-R3 50-R3	*	(13) (21)	37,910.91 13,605.56	18,077 6,099	24,763 10,364	642 289	1.69 2.12	38.6 35.9
		12-2019	30 <b>-</b> N3		(21)	10,000.00	0,099	10,304	209	2.12	30.9

	PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
DEPRECIABLE GROUP	DATE	CURVE	PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
TOTAL ACCOUNT 331.26				51,516.47	24,175	35,127	931	1.81	

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL ACO AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
332.00	RESERVOIRS, DAMS AND WATERWAYS MONROE STREET LITTLE FALLS LONG LAKE SPOKANE UPPER FALLS NINE MILE POST FALLS CABINET GORGE NOXON RAPIDS	12-2072 12-2059 12-2055 12-2060 12-2060 12-2060 12-2072 12-2079	110-R1 110-R1 110-R1 110-R1 110-R1 110-R1 110-R1 110-R1	* * * * * *	<ul> <li>(7)</li> <li>(5)</li> <li>(6)</li> <li>(4)</li> <li>(4)</li> <li>(13)</li> <li>(21)</li> </ul>	9,972,019,53 6,379,552,46 37,694,874,97 7,728,573,39 30,792,771,90 24,355,870,11 26,840,962,19 32,600,317,91	2,029,327 3,299,976 16,270,701 3,199,661 (295,051) 4,596,675 10,015,823 13,096,439	8,640,734 3,398,554 23,685,866 4,992,627 32,319,534 20,733,430 20,314,465 26,349,945	189,652 95,345 734,546 137,477 886,452 566,650 459,406 553,701	1.90 1.49 1.95 1.78 2.88 2.33 1.71 1.70	45.6 35.6 32.2 36.3 36.5 36.6 44.2 47.6
	TOTAL ACCOUNT 332.00					176,364,942.46	52,213,550	140,435,155	3,623,229	2.05	
332.10	RESERVOIRS, DAMS AND WATERWAYS - FISH AND WILDLIFE O LONG LAKE NINE MILE POST FALLS CABINET GORGE NOXON RAPIDS TOTAL ACCOUNT 332.10	CONSERVATION 12-2055 12-2060 12-2060 12-2072 12-2079	65-S1.5 65-S1.5 65-S1.5 65-S1.5 65-S1.5	* * * *	(6) (4) (4) (13) (21)	83,780,62 82,457,93 1,369,247,82 16,353,511,49 2,333,225,37 20,222,223,23	10,152 8,943 159,865 4,458,504 765,480 5,402,945	78,655 76,813 1,264,152 14,020,964 2,057,722 17,498,306	2,420 2,092 34,494 335,597 46,458 421,061	2.89 2.54 2.52 2.05 1.99 2.08	32.5 36.7 36.6 41.8 44.3
332.15	RESERVOIRS, DAMS AND WATERWAYS - FISH AND WILDLIFE C NINE MILE CABINET GORGE NOXON RAPIDS	ONSERVATION 12-2060 12-2072 12-2079	65-S1.5 65-S1.5 65-S1.5	* * *	(4) (13) (21)	11,034.00 1,494,661.03 956,178.75	1,291 333,197 326,496	10,184 1,355,770 830,480	279 31,929 17,935	2.53 2.14 1.88	36.5 42.5 46.3
	TOTAL ACCOUNT 332.15					2,461,873.78	660,984	2,196,434	50,143	2.04	
332.20	RESERVOIRS, DAMS AND WATERWAYS - RECREATION LITTLE FALLS LONG LAKE NINE MILE POST FALLS CABINET GORGE NOXON RAPIDS	12-2059 12-2055 12-2060 12-2060 12-2072 12-2079	65-S1.5 65-S1.5 65-S1.5 65-S1.5 65-S1.5 65-S1.5	* * * * *	(5) (6) (4) (4) (13) (21)	14,365,60 105,639,43 47,371,90 338,870,45 102,570,35 67,068,92	10,198 102,370 613 39,247 61,556 25,675	4,886 9,608 48,653 313,179 54,349 55,478	166 347 1,612 9,946 1,602 1,534	1.16 0.33 3.40 2.94 1.56 2.29	29.4 27.7 30.2 31.5 33.9 36.2
	TOTAL ACCOUNT 332.20					675,886.65	239,659	486,153	15,207	2.25	
333.00	TURBINES AND GENERATORS MONROE STREET LITTLE FALLS LONG LAKE SPOKANE UPPER FALLS NINE MILE POST FALLS CABINET GORGE NOXON RAPIDS	12-2072 12-2059 12-2055 12-2060 12-2060 12-2060 12-2072 12-2079	70-S0 70-S0 70-S0 70-S0 70-S0 70-S0 70-S0 70-S0	* * * * * *	(7) (5) (6) (4) (4) (13) (21)	11,574,970.98 39,200,539.26 8,735,798.61 1,181,041.97 41,134,467.99 2,233,650.87 46,869,962.84 88,822,330.21	2,972,505 7,020,990 8,604,845 1,209,744 (2,102,188) 2,245,416 9,665,042 23,740,028	9,412,714 34,139,577 655,101 42,161 44,882,034 77,581 43,298,016 83,734,992	247,099 997,073 22,570 1,203 1,302,488 2,417 1,096,192 1,951,957	2.13 2.54 0.26 0.10 3.17 0.11 2.34 2.20	38.1 34.2 29.0 35.0 34.5 32.1 39.5 42.9
	TOTAL ACCOUNT 333.00					239,752,762.73	53,356,382	216,242,176	5,620,999	2.34	
334.00	ACCESSORY ELECTRIC EQUIPMENT MONROE STREET LITTLE FALLS LONG LAKE SPOKANE UPPER FALLS NINE MILE POST FALLS CABINET GORGE NOXON RAPIDS	12-2072 12-2059 12-2055 12-2060 12-2060 12-2060 12-2072 12-2079	40-S0.5 40-S0.5 40-S0.5 40-S0.5 40-S0.5 40-S0.5 40-S0.5 40-S0.5	* * * * * *	(7) (6) (6) (4) (4) (13) (21)	3,034,242,49 13,963,868,82 4,504,041,49 4,298,798,08 18,580,449,17 2,448,273,68 17,382,299,74 19,615,761,09	226,273 2,732,501 2,817,339 1,218,411 1,839,520 776,477 4,054,954 3,497,046	3,020,367 11,929,561 1,956,945 3,338,315 17,484,147 1,769,728 15,587,045 20,238,025	113,418 417,552 71,987 127,947 614,603 61,723 471,285 696,979	3.74 2.99 1.60 2.98 3.31 2.52 2.71 3.55	26.6 28.6 27.2 26.1 28.4 28.7 33.1 29.0
	TOTAL ACCOUNT 334.00					83,827,734.56	17,162,521	75,324,133	2,575,494	3.07	
335.00	MISCELLANEOUS POWER PLANT EQUIPMENT MONROE STREET LITTLE FALLS LONG LAKE SPOKANE UPPER FALLS NINE MILE POST FALLS CABINET GORGE	12-2072 12-2059 12-2055 12-2060 12-2060 12-2060 12-2072	65-R1 65-R1 65-R1 65-R1 65-R1 65-R1 65-R1	* * * * *	(7) (5) (6) (6) (4) (4) (13)	$\begin{array}{r} 33,563.70\\ 548,948.45\\ 811,545.53\\ 104,449.82\\ 1,022,150.57\\ 809,339.90\\ 5,320,035.05\end{array}$	7,685 133,983 321,442 42,781 72,764 139,759 2,441,410	28,228 442,413 538,796 67,936 990,272 701,955 3,570,229	726 13,202 17,878 2,117 29,267 20,541 84,871	2.16 2.40 2.20 2.03 2.86 2.54 1.60	38.9 33.5 30.1 32.1 33.8 34.2 42.1

	PROBABLE RETIREMENT	SURVIVIOR		NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL ACC		COMPOSITE REMAINING
DEPRECIABLE GROUP	DATE	CURVE		PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
NOXON RAPIDS	12-2079	65-R1	*	(21)	3,353,312.33	1,562,384	2,495,124	58,811	1.75	42.4
TOTAL ACCOUNT 335.00					12,003,345.35	4,722,209	8,834,953	227,413	1.89	

MOXIM RAPIDS         12:07         32:07         85:47         12:07         32:07         44:48         4.11         1.18           332:10         MCCLLANCIDE POLATE CLUPENENT FOLDMENT - POLATE CLUPENENT - POLATE CLUPE			PROBABLE RETIREMENT	SURVIVIOR		NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
23-10         MSGLLAREOLS PONCER ANT EQUIPMENT - FRIH AND WILDLEFE CONSERVATION LISSET BORDER         103         117 GLB st. 12000 FT         70,077         144,09         1.431           100 FLORE RATE CONSERVATION LISSET BORDER         12000 FT         117 GLB st. 12000 FT         117 GLB st. 12000 FT         117 GLB st. 12000 FT         144,09         1.441         1.500           101 ALCOUNT St. 10         12000 FT         110         12000 FT												
L. CARRET GENDE         12.2072         0.503         •         (17)         117.6.2017         3.4.83         1.4.49         1.30           TOTA ACCOUNT 35.19         -         47.4.5.9         55.01         11.77           25.15         MISCL LADDER PONRT-INCLATEQUENDUT - FEMALAD MILDLE COGENATION CONTRATION         10.200         55.01         -         47.4.5.9         55.01         11.77           25.15         MISCL LADDER PONRT-INCLATEQUENDUT - FEMALAD MILDLE COGENATION CONTRATION         10.200         55.01         -         41.4.5.7         77.77         44.4         57.4           25.15         MISCL LADDER PONRT-INCLATE COGENATION CONTRATION         12.007         2.007.8         30.07         17.07         64.4         57.4           25.20         MISCL LADDOR FORMET-INCOMPART - RECERPTON         12.007         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         2.007.8         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002         10.002		(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
MOXIM PARDS         12:2079         55-70         2010         352:00         24:408         4.111         1.18           332:10         MICELLANGCA DEVANT SOLUPINAL TELEPHONE MULTER CONSERVATION I MARE         12:2079         56:48         -         10         14:52:1         55:00         1.77           332:10         MARE         12:2079         56:48         -         10         14:52:1         57:00         14:52:1         27:00         14:52:1         27:00         14:52:1         27:00         14:52:1         27:00<	335.10	MISCELLANEOUS POWER PLANT EQUIPMENT - FISH AND WILD	LIFE CONSERVATIO	N								
TOTAL ACCOUNT 36:0         Local         Local <thlocal< th="">         Local         Local</thlocal<>					*							38.2
32.51         MCCLUNCD/GORDEPLANT EQUIPMENT - FISH AND WILCLE CONSERVATION (CONTRACT, LS PROVED PLANT EQUIPMENT - FISH AND WILCLE CONSERVATION (CONTRACT, LS PROVED PLANT EQUIPMENT - FISH AND WILCLE CONSERVATION (CONTRACT, LS PROVED PLANT EQUIPMENT - RECREATION (CONTRACT, LS PROVED PLANT EQUIPMENT - RECREATION EQUIPMENT - RECREATION (CONTRACT, PROVED PLANT EQUIPMENT - RECREATION EQUIPMENT - RE		NOXON RAPIDS	12-2079	55-R3	•	(21)	355,980.02	286,047	144,689	4,141	1.16	34.9
LINELAKE 12005 2543 + 013 44201 3 472 14,880 466 3 19 HOLD KARDEN 12007 2548 + 013 44201 2 472 14,880 456 237 HOLD KARDEN 12007 2548 + 013 44201 2 472 14,880 456 237 HOLD KARDEN 12007 2548 + 013 44201 2 472 14,880 456 237 HOLD KARDEN 12007 2 558 + 013 457 4 232 77.0 HOLD 1200 120 120 120 120 120 120 120 120 12		TOTAL ACCOUNT 335.10					473,415.83	364,916	198,522	5,550	1.17	
PCOT FALLS         12200         0.843         1 <th1< th="">         1         1</th1<>	335.15											
CAULET CORE         12:2072         5:54:8         (1)         24:07:66         12:382         26:578         5:62.2         2.27           TOTAL ACCOUNT 26:16         83:60:70         37:051         97:052         22:07         97:058         12:022         24:07           S3:20         MESELANDUS POWER LAT EDURANT - RECREATION LONG LAKE         12:025         55:48         (1)         12:0451         220         17:018         81:8         31:8           MICELANDUS POWER LATE EDURANT - RECREATION LONG LAKE         12:0255         55:48         (1)         12:0451         220         17:018         81:8         31:8           MICELANDUS POWER PLATE EDURANT - RECREATION LONG LAKE         12:0205         55:48         (1)         12:0100         32:02         17:018         12:021         24:48         12:021         24:48         11:18         22:02         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:28         10:018         2:018 <td< td=""><td></td><td></td><td></td><td></td><td>*</td><td></td><td></td><td></td><td></td><td></td><td></td><td>32.9 37.2</td></td<>					*							32.9 37.2
Dockson Backborn         Unit Status				55-R3		(13)			265,798	5,852		45.4
33.20         NEXCELUZED OPER PLANT EQUIPMENT - RECREATION NIEK NUEL         22.005         65-R3         •         (i)         12.700         65-R3         •         (i)         12.701         25.80         11.81         27.81         11.81         27.81         11.81         27.81         11.81         27.81         11.81         27.81         11.81         12.83         11.81         12.83         11.81         12.83 <th12.83< th=""> <th12.83< th="">         12.83<!--</td--><td></td><td>NOXON RAPIDS</td><td>12-2079</td><td>55-R3</td><td>*</td><td>(21)</td><td>578,629.85</td><td>23,277</td><td>676,865</td><td>14,230</td><td>2.46</td><td>47.6</td></th12.83<></th12.83<>		NOXON RAPIDS	12-2079	55-R3	*	(21)	578,629.85	23,277	676,865	14,230	2.46	47.6
LONG LAVE         12:305         56-74         22:507         22:67         12:305         12:24           NOXIN RAPDS         12:307         56-78         1(0)         12:412         13:35         11:22         12:35           TOTAL ACCOUNT 35:20         12:307         56-78         1(0)         12:35         13:35         12:35         13:35         12:35         13:35         12:35         13:35         12:35         13:35         12:35         13:35         12:35         13:35         12:35         13:35         12		TOTAL ACCOUNT 335.15					856,854.70	37,061	974,931	21,002	2.45	
NHE BILE         12.000         5543         (b)         13.741_21         956         18.353         514         2.74           MONON NAPIDS         12.007         5943         (c)         13.438_33         7.001         17.230         17.185         7.11         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         2.48         2.48         17.11         17.11         2.48.08         17.220         60.52.5         17.11         40.050         12.262         2.48         17.11         17.11         40.050         12.262         2.48         17.11         17.11         40.050         12.262         2.48         17.11         17.11         40.050         12.262         2.48         12.27         12.262         2.48         17.71         40.050         12.262         2.48         12.27         14.483         2.52         12.20         2.44         17.27         14.483         12.27         14.483         12.27         14.25         12.20         14.27         14.25         <	335.20		10 0000									
CABMET GORGE         12:2072         55-R3         1 (1)         44:308.33         24:33         31:68         711         1.44           TOTAL ACCOUNT 33:00         199.156.00         32:00         199.156.00         32:00         124:59         1.68         2:28           SS0.07         ROURDES THELLS         12:2072         60:52.5         10         50:44:44         14:745         33:235         1.289         2:51           MORNER STREET GORGE         12:2072         60:52.5         10         50:44:24         17/7         1.58:39         2:55           MORNER STREET GORGE         12:2079         60:52.5         10         50:44:24         17/7         1.58:39         2:55           MORNER STREET GORGE         12:2079         60:52.5         10         50:44:24         14:077         13:69:26         2:36:2         2:65           MORNER STREET GORGE         12:2079         60:52.5         10         50:47:4         14:05:57         7:72:6:2         7:73:53         7:73:52         2:36:2         2:65         17:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:73:50:1         7:					*							33.0 36.1
TOTAL ACCOUNT 35:20         139,15:00         32.00         124,455         3,155         2.25           330.00         ROADS, RALEADAS AND BREDGES MONDES STREET SPINE MILE POST FALS CABRET CALLS         12:000         60-82.5         ·         (7)         50.446.44         14,745         30.255         1,286         2.51           SPINE MILE POST FALS CABRET GORGE         12:000         60-82.5         ·         (4)         577,943         440,077         10.660         2.43           CABRET GORGE         12:007         60-82.5         ·         (4)         577,943         2.51         2.53         2.51         2.53         2.54         7.714         440,077         10.68         2.43         2.53           CABRET GORGE         12:079         60-82.5         ·         (13)         197,107,08         119,004         700,210         2.148         2.27           TOTAL HORG PROUCHTOR FLANT         -         -         644,904,473.45         104,057         104,040         2.00         70         104,040         2.00         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01         2.01		CABINET GORGE	12-2072	55-R3		(13)	49,308.33	24,533	31,185	711	1.44	43.9
39.00       ROUSS, BALROUSS AND BRIDGES SPICANE UPPER FALLS       12,2072       60,52.5       (7)       50,44.6,4       14,74.5       95,25.6       12,62.2       2,43         NOURSE TREET       12,2060       60,52.5       (8)       50,44.7,51       45,39.6       12,62.2       2,43         NOURNE UPPER FALLS       12,2000       60,52.5       (8)       50,44.7,51       45,39.6       12,62.0       2,43         POST FALLS       12,2000       60,52.5       (8)       12,2002       60,52.5       (10)       57,44.7,2       53,32.2       647,73       14,80.8       2,25.2         TOTAL ACCOUNT 336,00       3,462,246.7       14,04.97       14,92.40       14,04.97       14,92.40       14,04.97       14,92.40       14,04.97       14,92.40       14,92.41       15,76.700       2,27         OTHER PRODUCTION PLANT       64,94.4,47       (1)       9,022.80       3,280       5,430       344       381         NORTHEAST TO MENANT       12,203       56,44       (1)       9,022.80       3,280       5,430       344       381         NORTHEAST TO MENANT       12,203       56,44       (1)       9,022.80       3,280       144,220       140,604       362         NORTHEAST TO MENANT       <		NOXON RAPIDS	12-2079	55-R3	*	(21)	45,388.32	7,091	47,829	1,082	2.38	44.2
MONROE STREET         12.2072         69.32.5         (7)         50.44.4.4         14.745         50.23.5         1.268         2.51           SPORVARU (PPERFLS)         12.2000         69.32.5         (0)         50.24.2.4.2         74.751         45.3967         12.22         2.48           MORE STRELS         12.2000         69.32.5         (1)         57.41.72         25.32.2         447.779         14.5.83         2.52           CABNET CORCE         12.2072         69.32.5         (2)         2.362.208.77         1.618.8.66         2.366.127         66.52.5         1.90           TOTAL ACCOUNT 336.00         3.662.208.77         1.618.8.66         2.366.127         66.52.5         1.90           TOTAL HORO PRODUCTION PLANT         3.662.208.77         1.618.8.66         2.366.127         66.52.5         1.90           STRUCTURES AND IMPROVEMENTS         12.2038         55.84         (1)         9.228.80         3.780         5.839         3.44         3.81           MORTHEAST TREEME         12.2038         55.84         (1)         9.176.23.83         79.7112         6.44.80         1.76         0.23           GOTAL HORO RODUCTION PLANT         12.2038         55.84         (1)         75.87.724         9.800.994		TOTAL ACCOUNT 335.20					139,135.00	32,802	124,565	3,125	2.25	
SPCKANE UPER FALLS         12,000         00.82.5         0.01         500,242.34         74,751         443,388         12,222         2.48           NNE ME         12,000         00.82.5         0.01         549,470.00         27,049         450,077         12,300         252         252           CARNET CONDRE         12,007         06.82.5         (13)         137,1012.63         170,210         12,300         12,007         12,420         252         25           TOTAL ACCOUNT 386.00         27,077         1,816.898         2,306,177         1,816.898         2,306,177         1,916.925         190           TOTAL ACCOUNT 386.00         3602,206,77         1,816.898         2,306,177         1,816.898         2,306,177         1,916.808         3,81           TOTAL ACCOUNT 386.00         32,899         5,540         117,475,763         391,714,641         15,767,699         2,27           OTHER PRODUCTION PLANT         12,2038         5,544         (1)         9,026,80         3,289         5,400         3,44         3,81           NORTHERS MOM INFOVEMENTS         12,2038         5,544         (1)         17,30,232         5,848         (2)         17,376,373,24         9,000,994         6,866,898         472,092         2	336.00		10.0070									
NNE MLE POSTFALS         12:2000         00:82.5         (a)         594,870.06         207,948         410,717         13:899         2.35           CASWET DRGE         12:2007         00:82.5         (a)         177,101.23         1782.20         774.20         144.53         2.27           TOTAL ACCOUNT 336:00         362.5         (c)         3662.26.7         1.88.85         12.207         00:52.7         1.98         1.00.07         1.72.20         0.52.5         1.99           TOTAL ACCOUNT 336:00         3662.26.7         1.88.85         2.366,177         09.527         1.99           TOTAL HYBO PRODUCTON PLANT         544,904,473.45         174,757.033         591,74.841         15,767,090         2.27           THER REDUCTOR PLANT         555.64         (1)         50.286.0         3.209         5.530         3.44         3.51           NORTHEAST DURINE         12:203         55.64         (1)         173.02.53         7751.12         24.465         1.756         0.23           RUTHOULT REAK         12:204         55.84         (1)         173.02.53         7751.12         3.44         3.41         3.42           COVICT SERVINGS 2         12:204         55.84         (1)         173.73.24         9.86					*							30.9 36.8
CAINET CORRE         12:072         09:52.5         (10)         107/17/246         112:034         270/210         51:248         277           TOTAL ACCOUNT RAPIDS         12:079         69:52.5         (21)         259/74:63         140:057         170/210         51:248         27           TOTAL ACCOUNT 38:00         366:22.66.77         1.618.856         2.366:127         69:55         1.90           TOTAL ACCOUNT 98:00         SFR4         (1)         50:22.66.77         1.618.856         2.366:127         69:55         1.90           341.00         STRUTURES AND MPROVENENTS BOULDER AND MPROVENENTS BOULDER PARK         12:203         55:R4         (1)         77:10:12         24:48         1.36:32         3.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47         2.43         3.47		NINE MILE	12-2060	60-S2.5	*	(4)	594,870.06	207,948	410,717	13,969	2.35	29.4
MOXINI RADIOS*         12:2075         60:52.5         (21)         12:07/4 63         14:0057         172.200         15:53         12:53           TOTAL ACCOUNT 38:00         3.662.26:77         1.618.866         2.396.127         69.225         1.90           TOTAL ACCOUNT 38:00         644,904,473.45         174.200         1.513         591,714,441         15,767.090         2.27           TOTAL ACCOUNT 38:00         591,714,441         15,767.090         2.27         644,904,473.45         174,757,033         591,714,441         15,767.090         2.27           OTHER FRODUCTION PLANT         694,904,473.45         174,1757,033         591,714,441         15,767.090         2.38         3.81           MONTHEAST LWRINE         12:2038         55-84         (1)         9.028.80         3.299         5.830         3.44         3.81           RATHORIM TURENRE         12:2034         55-84         (1)         171,255         1771,132         2.468         3.77         2.32           TOTAL ACCOUNT 341.00         172,376,373,32         5.984         (1)         172,376,373,24         5.984         2.27         2.468         3.67         2.27           342.00         FUEL HOLDERS AND ACCESSORIES         12:2034         55-83         (1) <td></td> <td>37.6</td>												37.6
TOTAL HYDRO PRODUCTION PLANT         684,904,473.48         174,75,033         691,74,841         15,767,090         2.27           OTHER PRODUCTION PLANT					*							35.8 29.9
OTHER PRODUCTION PLANT           31.00         STRUCTURES AND IMPROVEMENTS KETTLE FALLS         12.003         55.84         1 (1)         70.028.05         70.290         54.80         1.45         0.23           B         NORTHLAST INFORME         12.003         55.84         1 (1)         70.028.05         70.912         54.465         1.755         0.23           B         RATHORING TURBINE         12.003         55.84         1 (1)         70.028.05         70.912         54.465         1.756         0.23         1.91         2.24         1.91         2.20         2.44.65         1.91         2.20         2.24         1.91         1.91         3.63         1.91         3.63         1.91         2.20		TOTAL ACCOUNT 336.00					3,662,266.77	1,618,856	2,396,127	69,525	1.90	
OTHER PRODUCTION PLANT           31.00         STRUCTURES AND IMPROVEMENTS KETTLE FALLS         12.203         55.84         1 (1)         70.223.05         77.391         5.580         344         3.81           NORTINEAST TURINE         12.203         55.84         1 (1)         70.722.35         77.391         5.480         1.75         0.23           B         RATHORIUM TURINE         12.203         55.84         1 (1)         70.722.35         77.812         24.455         1.75         0.23           COYDE SPRINGS 2         12.204         55.84         1 (1)         3.757.952.1         5.786.408         6.324.255         25.912         2.72           COYDE SPRINGS 2         12.204         55.83         1 (1)         3.828.14         30.615         19.617         1.203         1.85           MCDUERS AND ACCESSORIES         1         17.376.37.324         9.00.094         8.856.288         472.092         2.72           MCTULE FARME         12.203         55.87.3         1 (1)         38.289.14         30.615         19.617         1.203         1.85           NOTHER SPRINCE         12.2034         55.87.3         1 (1)         38.289.14         30.615         2.649         2.47 <td< td=""><td>TOTAL H</td><td>IYDRO PRODUCTION PLANT</td><td></td><td></td><td></td><td></td><td>694,904,473,45</td><td>174,757,033</td><td>591,714,841</td><td>15,767,090</td><td>2.27</td><td></td></td<>	TOTAL H	IYDRO PRODUCTION PLANT					694,904,473,45	174,757,033	591,714,841	15,767,090	2.27	
341.00       STRUCTURES AND IMPROVEMENTS KETTLE FALLS       12.2038       55.74       • (1)       9.028.80       3.289       5.800       3.44       3.61         NORTHEAST TURBINE       12.2035       55.74       • (1)       1.273.891.95       598.53       688.078       33.476       2.63       2.62       2.65       2.62       2.65								,				
KETTLE FALLS       12-2038       55-R4       · (1)       9.028.80       3.289       5.830       34.4       3.81         BOULDER PARK       12-2042       55-R4       · (1)       1.273.891.95       568.553       668.076       33.476       2.63         BOULDER PARK       12-2034       55-R4       · (1)       1.273.891.95       568.553       668.076       33.476.64       2.63       226.913       2.52         COVOTE SPRINGS 2       12-2043       55-R4       · (3)       11.767.925.21       5.766.400       6.324.255       226.913       2.52         TOTAL ACCOUNT 341.00       TOTAL ACCOUNT 341.00       T.7376.373.24       9.080.994       8.856.898       472.092       2.72         S42.00       FUEL HOLDERS, PRODUCERS AND ACCESSORIES       ECTILE FALLS       10.036.05       2.2067       713       0.58         NORTHEAST TURBINE       12-2034       55-R3       · (1)       180.219       10.035.20       760.021       557.45       3.22         S42.01       FUEL HOLDERS, PRODUCERS AND ACCESSORIES       ECTILE FALLS       12-2034       55-R3       · (1)       180.219       10.035.20       760.021       557.45       3.22         S0ULDER PARK       12-2034       55-R3       · (1)       1.696.804	UTHER											
NORTHEAST TURBINE         12-2035         55-R4         (7)         751/02.35         779,112         24.485         1,755         0.23           BOULDER PARK         12-2043         55-R4         (4)         3.584,601.93         1.913.632         1.814.250         140.604         3.32           COVOTE SPRINGS 2         12-2043         55-R4         (4)         3.584,601.93         1.913.632         1.814.250         140.604         3.32           TOTAL ACCOUNT 341.00         17.757.925.21         5.786.408         6.324.255         2.959.13         2.272           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         12-2038         55-R3         (1)         89.232.19         70.508         19.617         1.203         1.35           NORTHEAST TURBINE         12-2034         55-R3         (1)         102.232.19         70.508         19.617         1.203         1.35           BOULDER PARK         12-2034         55-R3         (1)         102.143.44         16.093         147.672         7.159         4.42         1.400.520         760.021         59.745         3.52         1.244         1.005.20         760.021         59.745         3.52         1.244         16.093         147.672         7.159         4.42         <	341.00		10 2029	55 D4	*	(1)	0.029.90	2 290	E 920	244	2.01	16.9
BOULDER PARK         12:202         35-74         (1)         12:203         100         2:30         100,00         2:30           COYOTE SPRINGS 2         12:204         55-R4         (3)         11,757,022:1         5.786,408         6.324,205         295,013         2.32           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         17,376,373.24         9,080,994         8,865,898         472,092         2.72           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         12:203         55-R3         (1)         89,222,19         70,508         19,617         1.203         1.35           NORTHEAST TURBINE         12:2034         55-R3         (1)         162,133.44         16,093         147,672         7,159         4.42           NORTHEAST TURBINE         12:2034         55-R3         (1)         162,143.44         16,093         147,672         7,159         4.42         144,0695         2,449         2,249         2,847         2,848         2.28         12,204         55-R3         (3)         19,197,792         45,642         49,095         2,449         2,82         13         13,0         14,0244         16,33         14,0244         16,33         14,0244         16,33         14,0244         16,34					*							14.0
Incomposition billing         12-2043         55-R4         (1)         3-000-00-23         1.3-00.06         1.3-24.265         290-913         2.52           TOTAL ACCOUNT 341.00         17.376.373.24         9.080.994         8.856.898         472.092         2.72           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         17.376.373.24         9.080.994         8.856.898         472.092         2.72           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         12.2035         55-R3         (1)         80.232.19         70.508         19.617         1.203         1.35           NORTHEAST TURBINE         12.2043         55-R3         (1)         11.251.444         16.093         147.672         7.159         4.42           RATHORUM TURBINE         12.2044         55-R3         (3)         19.977.92         45.642         49.095         2.649         2.88           COYOTE SPRINGS 2         12.2043         55-R3         (3)         19.000.289.10         10.222.924         9.347.373         448.888         2.36           TOTAL ACCOUNT 342.00         2         12.2043         55-R3         (1)         57.63.47.89         11.395.299         10.326.745         519.857         2.47           343.00         PRIME MOVERS												20.6
TOTAL ACCOUNT 341.00         17,376,373.24         9,080,994         8,856,898         472,092         2.72           342.00         FUEL HOLDERS, PRODUCERS AND ACCESSORIES         12-2038         55-R3         (1)         88,232.19         70,508         19,617         1.203         1.35           NORTHEAST TURBINE         12-2038         55-R3         (1)         162,143.44         16,093         144,672         7,159         4.42           RATHDRUM TURBINE         12-2042         55-R3         (1)         162,143.44         16,093         144,672         7,159         4.42           RATHDRUM TURBINE         12-2040         55-R3         (1)         162,143.44         16,093         144,672         7,159         4.42           RATHDRUM TURBINE         12-2040         55-R3         (3)         19,000,289.10         1.003,262,745         519,857         2.47           343.00         PRIME MOVERS         KETTLE FALLS         12-2038         60-S2         (1)         8,670,084.38         6,454,410         2,302,376         140,904         1.63           NORTHEAST TURBINE         12-2038         60-S2         (1)         8,670,084.38         6,454,410         2,302,376         140,904         1.63           NORTHEAST TURBINE					*							12.9
342.00       FUEL HOLDERS, PRODUCERS AND ACCESSORIES         KETTLE FALLS       12-2038       55-R3       (1)       89,232.19       70,508       19,617       1.203       1.35         NORTHEAST TURBINE       12-2035       55-R3       (1)       162,103.44       16,093       147,672       7,159       4.42         RATHORUM TURBINE       12-2043       55-R3       (1)       162,143.44       16,093       147,672       7,159       4.42         RATHORUM TURBINE       12-2043       55-R3       (4)       1,655,808.40       1,003,820       70,021       59,745       3.52         LANCASTER       12-2040       55-R3       (3)       19,000,269.10       10,222,924       9,347,373       448,888       2.36         TOTAL ACCOUNT 342.00       21,076,347.89       11,395,299       10,326,745       519,857       2.47         343.00       PRIME MOVERS       12-2038       60-52       (1)       8,670,084.38       6,454,410       2,302,376       140,904       1.63         NORTHEAST TURBINE       12-2035       60-52       (1)       57,716,237,397       2.7,757       0.31         BOULDER PARK       12-2036       60-52       (1)       5,67,842       2,999,013       80,5484       63			12-2043	55-K4		(3)	· · · · · · · · · · · · · · · · · · ·					21.4
KETTLE FALLS         12:2038         55-R3         (1)         89:232.19         70:508         19:617         1.203         1.35           NORTHEAST TURBINE         12:2035         55-R3         (7)         38:896.84         36:512         2.967         213         0.58           BOULDER PARK         12:2042         55-R3         (1)         16:14:344         16:053         147:672         7.159         4.42           RATHORUM TURBINE         12:2040         55-R3         (4)         1.898,808.40         1,003,820         760.021         59:745         3.52           LANCASTER         12:2040         55-R3         (3)         19:000,289:10         10.222,924         9:347,373         448,888         2.36           TOTAL ACCOUNT 342.00         21:076:347.89         11.395,299         10,326,745         519,857         2.47           343.00         PRIME MOVERS         22:035         60-52         (1)         8.670.084.38         6.454.410         2.302,376         140.904         1.63           NORTHEAST TURBINE         12:2035         60-52         (1)         5.7216.28         30.861         26.937         1.342         2.35           BOULDER PARK         12:2034         60-52         (1)         5.7							17,376,373.24	9,080,994	8,856,898	472,092	2.72	
NORTHEAST TURBINE         12-2035         55-R3         (7)         36,896,84         36,512         2,967         213         0.58           BOULDER PARK         12-2042         55-R3         (1)         162,143,44         16,003         147,672         7,159         4,42           RATHDRUM TURBINE         12-2043         55-R3         (4)         1,695,808,40         1,003,620         760,021         59,745         3.52           LANCASTER         12-2043         55-R3         (3)         91,977,92         45,642         49,095         2,649         2.88           COYOTE SPRINGS 2         12-2043         55-R3         (3)         19,002,081.00         10,222,94         9,347,373         448,888         2.36           TOTAL ACCOUNT 342.00         21,076,347.89         11,395,299         10,326,745         519,857         2.47           343.00         PRIME MOVERS         12-2035         60-S2         (1)         8,670,084,38         6,454,410         2,302,376         140,904         1.63           NORTHEAST TURBINE         12-2034         60-S2         (1)         57,216,28         30,851         26,937         1,342         2.35           General Cores         12-2034         60-S2         (1)         <	342.00		12 2029	55 D2	*	(1)	90 322 40	70 509	10 617	1 202	1 25	16.3
BOULDER PARK         12:202         55-R3         (1)         162:143.44         10:033         17/672         7,159         4.42           RATHORUM URBINE         12:2034         55-R3         (4)         1.665:808.40         10:03:820         760:021         59:745         3.52           LANCASTER         12:2040         55-R3         (3)         91:977.92         45:642         49:095         2:649         2:88           COYOTE SPRINGS 2         12:2043         55-R3         (3)         19:000:289:10         10:222,924         9:347,373         448,688         2:36           TOTAL ACCOUNT 342.00          21:076;347.89         11:395,299         10:326,745         519,857         2:47           343.00         PRIME MOVERS          21:076;347.89         11:395,299         10:326,745         519,857         2:47           344.00         CBRING MOVERS          2:2035         60:52         (1)         8:670,084.38         6:454.410         2:302.376         140.904         16:3           NORTHEAST TURBINE         12:2035         60:52         (1)         5:768.82         2:99,013         26:648         65:599         1.74           TOTAL ACCOUNT 343.00          2:2034					*							13.9
LANCASTER 12-2040 55-R3 * (3) 91,977.92 45,642 49,095 2,649 2.88 COYOTE SPRINGS 2 12-2043 55-R3 * (3) 19,000,289.10 10,222,924 9,347,373 448,888 2.36 TOTAL ACCOUNT 342.00 21,076,347.89 11,395,299 10,326,745 519,857 2.47 343.00 PRIME MOVERS KETTLE FALLS 12-2038 60-52 * (1) 8,670,084.38 6,454,410 2,302,376 140,904 1.63 NORTHEAST TURBINE 12-2035 60-52 * (1) 57,216.28 30,851 26,937 1,342 2.35 RATHORUM TURBINE 12-2034 60-52 * (4) 3,6563,224.03 2,999,013 805,648 63,599 1.74 TOTAL ACCOUNT 343.00 21,433,00 21,438 50-R1 * (1) 234,260,93 59,467 177,136 11,036 4.71 NORTHEAST TURBINE 12-2033 50-R1 * (1) 234,260,93 59,467 177,136 11,036 4.71 NORTHEAST TURBINE 12-2033 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2034 50-R1 * (1) 31,370,459.06 18,485,718 13,198,446 704,436 2.25 RATHORUM TURBINE 12-2004 50-R1 * (3) 200,505.82 98,908 115,853 6,620 3.17		BOULDER PARK	12-2042	55-R3	*	(1)	162,143.44	16,093	147,672	7,159	4.42	20.6
COYOTE SPRINGS 2       12-2043       55-R3       * (3)       19,000,289.10       10,222,924       9,347,373       448,888       2.36         TOTAL ACCOUNT 342.00       21,076,347.89       11,395,299       10,326,745       519,857       2.47         343.00       PRIME MOVERS       12-2038       60-52       * (1)       8,670,084.38       6,454,410       2.302,376       140,904       1.63         NORTHEAST TURBINE       12-2035       60-52       * (1)       57,716.28       30,851       26,937       1,342       2.35         RATHDRUM TURBINE       12-2034       60-52       * (1)       57,716.28       30,851       26,937       1,342       2.35         TOTAL ACCOUNT 343.00       21,443,902.91       18,799,230       3,512,358       233,602       1.09         344.00       GENERATORS       12-2038       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12-2038       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12-2034       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHE					*							12.7 18.5
343.00       PRIME MOVERS         KETTLE FALLS       12-2038       60-S2       11       8,670,084.38       6,454,410       2,302,376       140,904       1.63         NORTHEAST TURBINE       12-2035       60-S2       77       9,058,274.22       9,314,957       377,397       27,757       0.31         BOULDER PARK       12-2034       60-S2       1       157,216.28       30,851       26,937       1,342       2.35         RATHDRUM TURBINE       12-2034       60-S2       1(4)       3,658,328.03       2,999,013       805,648       63,599       1.74         TOTAL ACCOUNT 343.00       2       21,443,902.91       18,799,230       3,512,358       233,602       1.09         344.00       GENERATORS       12-2038       50-R1       11       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12-2035       50-R1       (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12-2034       50-R1       (1)       31,370,459.06       18,485,718       13,198,446       704,436       2.25         RATHDRUM TURBINE       12-2042       50-R1       (1)       31,370,459.06       18,4					*							20.8
KETLE FALLS       12:2038       60-52       * (1)       8,670,084.38       6,454,410       2,302,376       140,904       1.63         NORTHEAST TURBINE       12:2035       60-52       * (7)       9,058,274.22       9,314,957       377,397       27,757       0.31         BOULDER PARK       12:2034       60-52       * (1)       57,716.28       30,851       26,937       1.342       2.35       37         RATHDRUM TURBINE       12:2034       60-52       * (4)       3,658,328.03       2,999,013       805,648       63,599       1.74         TOTAL ACCOUNT 343.00        21,443,902.91       18,799,230       3,512,358       233,602       1.09         344.00       GENERATORS        12:2038       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12:2035       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12:2042       50-R1       * (1)       31,370,459.06       18,485,718       13,198,446       704,436       2.25         RATHDRUM TURBINE       12:2044       50-R1       * (1)       31,370,459.06       18,485,718		TOTAL ACCOUNT 342.00					21,076,347.89	11,395,299	10,326,745	519,857	2.47	
KETLE FALLS       12:2038       60-52       * (1)       8,670,084.38       6,454,410       2,302,376       140,904       1.63         NORTHEAST TURBINE       12:2035       60-52       * (7)       9,058,274.22       9,314,957       377,397       27,757       0.31         BOULDER PARK       12:2034       60-52       * (1)       57,716.28       30,851       26,937       1.342       2.35       37         RATHDRUM TURBINE       12:2034       60-52       * (4)       3,658,328.03       2,999,013       805,648       63,599       1.74         TOTAL ACCOUNT 343.00        21,443,902.91       18,799,230       3,512,358       233,602       1.09         344.00       GENERATORS        12:2038       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12:2035       50-R1       * (1)       234,260,93       59,467       177,136       11,036       4.71         NORTHEAST TURBINE       12:2042       50-R1       * (1)       31,370,459.06       18,485,718       13,198,446       704,436       2.25         RATHDRUM TURBINE       12:2044       50-R1       * (1)       31,370,459.06       18,485,718	343.00	PRIME MOVERS										
NORTHEAST URBINE       12-203       50-32       (7)       50,05,21+22       50,05,21+22       50,7,57       27,757       0.31         BOULDER PARK       12-2034       60-52       (1)       57,756,28       30,851       26,937       1,342       2.35       30       30       30       50,757       1,342       2.35       30		KETTLE FALLS			*							16.3
Doubler (MT)       12-2034       60-52       (1)       31,210,20       30,611       20,990,013       805,648       63,599       1,74         TOTAL ACCOUNT 343.00       21,443,902.91       18,799,230       3,512,358       233,602       1.09         344.00       GENERATORS       12-2034       50-R1<*												13.6 20.1
344.00         GENERATORS KETILE FALLS         12-2038         50-R1         *         (1)         234,260.93         59,467         177,136         11,036         4.71           NORTHEAST TURBINE         12-2035         50-R1         *         (7)         2,856,667.42         2,692,182         364,453         27,540         0.96           BOULDER PARK         12-2042         50-R1         *         (1)         31,370,459.06         18,485,718         13,198,446         704,436         2.25           RATHDRUM TURBINE         12-2034         50-R1         *         (4)         51,202,472,43         29,047,819         24,202,753         1,975,711         3.86           LANCASTER         12-2040         50-R1         *         (3)         206,505.82         98,008         115,853         6,620         3.17				60-52 60-S2								12.7
KETLE FALLS         12-2038         50-R1         *         (1)         224/260.93         59.467         177.136         11.036         4.71           NORTHEAST TURBINE         12-2035         50-R1         *         (7)         2.856.667.42         2.692.182         364.453         27,540         0.96           BOULDER PARK         12-2042         50-R1         *         (1)         31.370.459.06         18,485,718         13.198.446         704.436         2.25           RATHDRUM TURBINE         12-2034         50-R1         *         (4)         51.202.472.43         29.047.819         24.202.753         1.975.711         3.86           LANCASTER         12-2040         50-R1         *         (3)         208.505.82         98.908         115.853         6.620         3.17		TOTAL ACCOUNT 343.00					21,443,902.91	18,799,230	3,512,358	233,602	1.09	
NORTHEAST TURBINE         12-2035         50-R1         *         (7)         2,856,667.42         2,692,182         364,453         27,540         0.96           BOULDER PARK         12-2042         50-R1         *         (1)         31,370,459.06         18,485,718         13,198,446         704,436         2.25           RATHDRUM TURBINE         12-2034         50-R1         *         (4)         51,202,472.43         29,047,819         24,202,753         1,975,711         3.86           LANCASTER         12-2040         50-R1         *         (3)         206,505.82         98,088         115,853         6,620         3.17	344.00											
BOULDER PARK         12-2042         50-R1         *         (1)         31,370,459.06         18,485,718         13,198,446         704,436         2.25           RATHDRUM TURBINE         12-2034         50-R1         *         (4)         51,202,472.43         29,047,819         24,202,753         1,975,711         3.86           LANCASTER         12-2040         50-R1         *         (3)         206,505.82         98,908         115,853         6,620         3.17					*							16.1
RATHDRUM TURBINE         12-2034         50-R1         *         (4)         51,202,472.43         29,047,819         24,202,753         1,975,711         3.86           LANCASTER         12-2040         50-R1         *         (3)         208,505.82         98,908         115,853         6,620         3.17					*							13.2 18.7
		RATHDRUM TURBINE	12-2034	50-R1	*	(4)	51,202,472.43	29,047,819			3.86	12.3
COYOLE SPRINGS 2 12-2043 50-R1 * (3) 153.915.854.36 54.699.583 103.833.747 5.227.712 3.40					*							17.5
		CUTUTE SPRINGS 2	12-2043	50-R1	•	(3)	153,915,854.36	54,699,583	103,833,747	5,227,712	3.40	19.9

	PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
DEPRECIABLE GROUP	DATE	CURVE	PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
TOTAL ACCOUNT 344.00				239,788,220.02	105,083,676	141,892,388	7,953,055	3.32	

		PROBABLE ETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
344.01	GENERATORS - SOLAR CENTRAL OPERATIONS FACILITY	12-2029	25-S2.5	* (3)	449,172.23	216,225	246,423	31,915	7.11	7.7
	BOULDER PARK	12-2029	25-S2.5	* (3) * (1)	22,481.62	1,845	20,861	1,200	5.34	17.4
	TOTAL ACCOUNT 344.01				471,653.85	218,070	267,284	33,115	7.02	
345.00	ACCESSORY ELECTRIC EQUIPMENT									
	KETTLE FALLS	12-2038	30-S0.5	* (1)	538,522.64	12,753	531,155	33,547	6.23	15.8
	NORTHEAST TURBINE	12-2035	30-S0.5	* (7)	1,243,060.53	1,316,097	13,978	1,134	0.09	12.3
	BOULDER PARK RATHDRUM TURBINE	12-2042 12-2034	30-S0.5 30-S0.5	* (1) * (4)	924,803.36 4,808,069.65	227,080 1,251,402	706,971 3,748,990	40,640 317,971	4.39 6.61	17.4 11.8
	LANCASTER	12-2034	30-S0.5	* (3)	308,080.38	22,741	294,581	17,099	5.55	17.2
	COYOTE SPRINGS 2	12-2043	30-S0.5	* (3)	17,886,372.01	11,301,510	7,121,453	439,978	2.46	16.2
	TOTAL ACCOUNT 345.00				25,708,908.57	14,131,584	12,417,128	850,369	3.31	
345.01	ACCESSORY ELECTRIC EQUIPMENT - SOLAR									
	CENTRAL OPERATIONS FACILITY	12-2029	25-S2.5	* (3)	33,209.41	11,701	22,505	2,961	8.92	7.6
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT	10 0005	05 80	* (7)	000 007 44	110,100	10.101	700	0.00	10.1
	NORTHEAST TURBINE BOULDER PARK	12-2035 12-2042	35-R2 35-R2	* (7) * (1)	398,997.44 64,652.42	416,493 8,668	10,434 56,631	799 2,924	0.20 4.52	13.1 19.4
	RATHDRUM TURBINE	12-2042	35-R2	* (4)	249,472.21	75,249	184,202	14,867	5.96	12.4
	COYOTE SPRINGS 2	12-2043	35-R2	* (3)	935,172.62	240,666	722,562	41,025	4.39	17.6
	TOTAL ACCOUNT 346.00				1,648,294.69	741,077	973,829	59,615	3.62	
TOTAL	DTHER PRODUCTION PLANT				327,546,910.58	159,461,630	178,269,135	10,124,666	3.09	
TRANSI	IISSION PLANT									
350.30	REMOVING PROPERTY OF OTHERS		80-R4	0	1,487,565.91	808,526	679,040	15,519	1.04	43.8
350.40	LAND RIGHTS		80-R4	0	21,370,166.35	6,109,257	15,260,909	252,654	1.18	60.4
352.00	STRUCTURES AND IMPROVEMENTS		65-S2	(15)	30,958,188.58	7,747,582	27,854,334	545,668	1.76	51.0
353.00 354.00	STATION EQUIPMENT TOWERS AND FIXTURES		46-R2 80-R4	(10) (10)	354,761,236.38 17,278,383.79	95,101,385 10,901,411	295,135,975 8,104,811	8,298,195 189,191	2.34 1.09	35.6 42.8
355.00	POLES AND FIXTURES		60-R2.5	(40)	333,668,354.17	77,105,789	390,029,907	8,017,633	2.40	48.6
356.00	OVERHEAD CONDUCTORS AND DEVICES		60-R3	(30)	175,262,336.99	51,880,548	175,960,490	4,425,996	2.53	39.8
357.00	UNDERGROUND CONDUIT		60-R4	0	3,524,684.97	924,722	2,599,963	57,388	1.63	45.3
358.00 359.00	UNDERGROUND CONDUCTORS AND DEVICES ROADS AND TRAILS		50-S3 75-R4	0	7,295,386.96 2,576,201.29	881,892 993,569	6,413,495 1,582,632	152,088	2.08 1.23	42.2 49.9
			75-R4	0				31,723		49.9
					948,182,505.39	252,454,682	923,621,556	21,986,055	2.32	
	UTION PLANT									
360.40	LAND - EASEMENTS		75-R4	0	3,919,239.32	387,325	3,531,915	52,468	1.34	67.3
361.00 362.00	STRUCTURES AND IMPROVEMENTS STATION EQUIPMENT		63-S1 43-R1.5	(15) (10)	28,833,810.29 162,535,477.01	8,187,808 46,837,456	24,971,074 131,951,569	497,230 4,194,733	1.72 2.58	50.2 31.5
364.00	POLES, TOWERS AND FIXTURES		63-R3	(60)	497,678,991.49	138,251,042	658,035,344	13,408,462	2.69	49.1
365.00	OVERHEAD CONDUCTORS AND DEVICES		65-R3	(55)	319,701,302.67	101,368,487	394,168,533	7,856,503	2.46	50.2
366.00	UNDERGROUND CONDUIT		65-S2.5	(25)	144,282,581.99	44,284,515	136,068,713	2,626,090	1.82	51.8
367.00	UNDERGROUND CONDUCTORS AND DEVICES		40-S1.5	(25)	252,143,399.05	127,247,806	187,931,443	6,132,115	2.43	30.6
368.00			50-R2.5	(10)	308,080,442.02	109,826,359	229,062,127	6,242,843	2.03	36.7
369.10	SERVICES OVERHEAD		70-R4	(35)	66,511,466.03	33,730,790	56,059,690	1,103,488	1.66	50.8
369.20	UNDERGROUND - SPOKANE NETWORK		70-R4	(35)	8,600,892.21	1,660,864	9,950,340	160,900	1.87	61.8
369.30	UNDERGROUND - OTHER		70-R4	(35)	126,203,635.53	47,338,457	123,036,451	2,217,626	1.76	55.5
	TOTAL SERVICES				201,315,993.77	82,730,111	189,046,481	3,482,014	1.73	
070.1-	METERS	10.0000			a					a -
370.10 370.30	IDAHO WASHINGTON STANDARD	12-2028	33-L1.5 12-L2.5	(2) (2)	24,506,399.42 1,027,480.24	16,172,372 296,841	8,824,155 751,189	1,364,365 80,758	5.57 7.86	6.5 9.3
370.30	WASHINGTON STANDARD WASHINGTON AMI		15-S2.5	(2)	59,447,402.71	8,551,329	52,085,022	4,478,602	7.53	11.6
	TOTAL METERS				84,981,282.37	25,020,541	61,660,366	5,923,725	6.97	
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES - CATALYST BUILDING	3	35-R3	0	604,986.51	23,632	581,354	17,318	2.86	33.6

		PROBABLE RETIREMENT SURVIVIOR		NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULATED ANNUAL ACCRUAL		COMPOSITE REMAINING	
	DEPRECIABLE GROUP	DATE	CURVE	PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)	
371.01 371.02	ELECTRIC VEHICLE CHARGING STATION RESIDENTIAL MULTI-UNIT DWELLINGS TOTAL ELECTRIC VEHICLE CHARGING STATION		10-S3 10-S3	0 0	2,572,461.22 165,896.47 2,738,357.69	717,097 	1,855,364 59,097 1,914,461	279,501 12,655 292,156	10.87 7.63 10.67	6.6 4.7	

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL ACC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
373.10	STREET LIGHTING AND SIGNAL SYSTEMS MERCURY VAPOR		33-S1	(15)	4,542,176.93	4,650,479	573,024	35,580	0.78	16.1
373.20	UNDERGROUND CONDUCTOR		33-S1	(15)	5,767,344.92	2,775,261	3,857,186	155,806	2.70	24.8
373.30 373.40	DECORATIVE AND METAL STANDARDS HIGH PRESSURE SODIUM VAPOR		33-S1 33-S1	(15) (15)	17,164,120.57	6,550,001	13,188,737	531,748 1,106,794	3.10 3.75	24.8 25.0
373.40	LED		33-S1	(15)	29,524,179.93 17,970,693.09	6,331,375 3,792,058	27,621,432 16,874,239	586,057	3.26	28.8
	TOTAL STREET LIGHTING AND SIGNAL SYSTEMS			(	74,968,515.44	24,099,174	62,114,618	2,415,985	3.22	
TOTAL D	DISTRIBUTION PLANT				2,081,784,379.62	709,088,152	2,081,037,998	53,141,642	2.55	
GENERA	L PLANT									
390.10	STRUCTURES AND IMPROVEMENTS - COMPANY		50-S1	(5)	17,871,784.76	2,401,202	16,364,172	368,082	2.06	44.5
391.00	OFFICE FURNITURE AND EQUIPMENT FURNITURE AND EQUIPMENT		15-SQ	0	33,038.66	2,141	30,898	2,203	6.67	14.0
391.00	COMPUTER HARDWARE		5-SQ	0	1,636,374.28	613,250	1,023,124	327,303	20.00	3.1
391.12	COMPUTER HARDWARE - AMI		5-SQ	0	326,249.47	163,115	163,134	65,254	20.00	2.5
	TOTAL OFFICE FURNITURE AND EQUIPMENT				1,995,662.41	778,506	1,217,156	394,760	19.78	
	TRANSPORTATION EQUIPMENT									
392.20	LIGHT TRUCKS		14-L2.5	10	8,069,708.69	4,208,989	3,053,749	336,680	4.17	9.1
392.30	MEDIUM TRUCKS		17-L2.5	10	25,968,428.69	11,001,930	12,369,656	990,508	3.81	12.5
392.40 392.50	HEAVY TRUCKS OTHER		20-R4 16-L2	10 10	12,764,812.10 8,290,921.49	4,325,582 3,317,405	7,162,749 4,144,424	503,016 392,099	3.94 4.73	14.2 10.6
002.00	TOTAL TRANSPORTATION EQUIPMENT		10 22	10	55,093,870.97	22,853,905	26,730,578	2,222,303	4.03	10.0
393.00	STORES EQUIPMENT		25-SQ	0	472,783.36	203,758	269,025	18,912	4.00	14.2
	TOOLS, SHOP AND GARAGE EQUIPMENT									
394.00 394.10	TOOLS, SHOP AND GARAGE EQUIPMENT ELECTRIC VEHICLE CHARGER		20-SQ 10-S2.5	0	7,396,275.89 117,230.09	2,134,054 61,134	5,262,222 56,096	369,582 11,147	5.00 9.51	14.2 5.0
394.10	ELECTRIC VEHICLE CHARGER		10-32.5	0	117,230.09	01,134	50,090	11,147	9.51	5.0
	TOTAL TOOLS, SHOP AND GARAGE EQUIPMENT				7,513,505.98	2,195,188	5,318,318	380,729	5.07	
	LABORATORY EQUIPMENT									
395.00 395.12	LABORATORY EQUIPMENT LABORATORY EQUIPMENT - AMI		15-SQ 15-SQ	0	2,901,500.20 253,883.45	485,994	2,415,506 195,364	193,434	6.67 6.67	12.5 11.5
395.12	LABORATORT EQUIPMENT - AMI		15-50	0	253,663.45	58,519	195,304	16,935	0.07	11.5
	TOTAL LABORATORY EQUIPMENT				3,155,383.65	544,513	2,610,870	210,369	6.67	
	POWER OPERATED EQUIPMENT									
396.30 396.40	MEDIUM TRUCKS HEAVY TRUCKS		16-L2 24-S1	0	4,329,903.21 21,869,320.06	3,171,982 16,077,964	1,157,921 5,791,356	158,345 411,472	3.66 1.88	7.3 14.1
396.40	OTHER		16-S0	0	4,057,267.11	1,894,977	2,162,290	196,355	4.84	14.1
	TOTAL POWER OPERATED EQUIPMENT				30,256,490.38	21,144,923	9,111,567	766,172	2.53	
	COMMUNICATION EQUIPMENT									
397.00	COMMUNICATION EQUIPMENT		15-SQ	0	46,103,096.93	24,744,035	21,359,062	3,075,067	6.67	6.9
397.50	SUB INTEGRATION DISTRIBUTION		15-SQ 15-SQ	0	3,537,825.37	655,984	2,881,841	235,914	6.67 6.67	12.2 13.9
397.60	DISTRIBUTION		15-SQ	U	563,964.48	41,387	522,577	37,616	6.67	13.9
	TOTAL COMMUNCATION EQUIPMENT				50,204,886.78	25,441,406	24,763,480	3,348,597	6.67	
398.00	MISCELLANEOUS EQUIPMENT		10-SQ	0	288,548.57	135,498	153,051	28,842	10.00	5.3
TOTAL G	SENERAL PLANT				166,852,916.86	75,698,901	86,538,217	7,738,766	4.64	
TOTAL D	DEPRECIABLE ELECTRIC PLANT				4,664,358,358.02	1,719,493,940	3,975,029,309	127,953,839	2.74	

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
3AS PL/	NT - WASHINGTON AND IDAHO									
NATURA	L GAS STORAGE AND PROCESSING PLANT									
350.20	RIGHTS OF WAY		65-R4	0	66,073.04	30,538	35,535	798	1.21	44.5
	STRUCTURES AND IMPROVEMENTS									
51.10 51.20	STRUCTURES AND IMPROVEMENTS COMPRESSOR STATION		55-R2.5 55-R2.5	(5) (5)	1,934,672.05 275,254.53	617,856 211,229	1,413,550 77,789	31,045 3,234	1.60 1.17	45.5 24.1
51.30	MEASURING AND REGULATING STATION		55-R2.5	(5)	52,850.07	41,396	14,096	586	1.17	24.1
1.40	OFFICE		55-R2.5	(5)	171,892.07	113,487	67,000	2,276	1.32	29.4
	TOTAL STRUCTURES AND IMPROVEMENTS				2,434,668.72	983,968	1,572,435	37,141	1.53	
	WELLS									
2.00	STORAGE WELLS RESERVOIRS		60-R4 50-R4	0	17,514,187.79 203,330.47	6,392,534 100,040	11,121,654 103,290	257,465	1.47	43.
52.20 52.30	NON-RECOVERABLE GAS		50-R4	0	5,359,690.41	3,880,450	1,479,240	3,858 45,788	1.90 0.85	26. 32.
	TOTAL WELLS				23,077,208.67	10,373,024	12,704,184	307,111	1.33	
3.00	LINES		65-R4	0	2,059,776.77	658,349	1,401,428	30,912	1.50	45.
1.00	COMPRESSOR STATION EQUIPMENT		55-R4	0	14,950,425.57	4,095,122	10,855,304	265,347	1.77	40.
5.00	MEASURING AND REGULATING EQUIPMENT		35-R3	0	1,559,281.17	900,020	659,261	19,345	1.24	34.
6.00 7.00	PURIFICATION EQUIPMENT OTHER EQUIPMENT		35-S2.5 45-R2	0 0	545,142.76 2,572,899.06	404,807 1,040,300	140,336 1,532,599	8,593 44,316	1.58 1.72	16. 34.
	ATURAL GAS STORAGE AND PROCESSING PLANT				47,265,475.76	18,486,129	28,901,082	713,563	1.51	
STRIB	JTION PLANT									
4.40	LAND - EASEMENTS		60-R4	0	668,024.19	55,211	612,813	11,343	1.70	54.
5.00	STRUCTURES AND IMPROVEMENTS		45-R2	0	1,575,588.81	291,324	1,284,265	37,193	2.36	34
6.00 8.00	MAINS MEASURING AND REGULATING EQUIPMENT - GENERAL		55-R3 32-R2	(20)	437,133,268.15 7,132,736.23	130,648,846 2,326,349	393,911,076	9,190,399 287,503	2.10 4.03	42. 20.
9.00	MEASURING AND REGULATING EQUIPMENT - GENERAL		37-S0.5	(15) (15)	6.602.678.34	2,320,349	5,876,298 5,430,357	208.581	3.16	20.
30.00	SERVICES		52-R3	(25)	321,283,115.49	111,465,916	290,137,978	7,115,867	2.21	40.
1.00	METERS									
	IDAHO WASHINGTON		35-R1 35-R1	(3) (3)	31,937,722.14 52,741,984.87	10,715,075 10,165,030	22,180,779 44,159,214	881,397 1,636,498	2.76 3.10	25. 27.
	WASHINGTON AMI		15-S2.5	(3)	26,583,363.26	3,768,633	23,612,231	1,986,240	7.47	11.
	TOTAL METERS				111,263,070.27	24,648,738	89,952,224	4,504,135	4.05	
5.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMEN	νT	65-R2.5	(15)	4,095,769.59	1,637,452	3,072,683	59,548	1.45	51.0
TAL C	ISTRIBUTION PLANT				889,754,251.07	273,236,558	790,277,694	21,414,569	2.41	
ENERA	L PLANT									
9.42	LAND EASEMENTS		50-R3	0	2,368.16	153	2,215	48	2.03	46.1
0.10 1.10	STRUCTURES AND IMPROVEMENTS - COMPANY OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE		30-R3 5-SQ	(5) 0	25,396,990.63 143,319.84	3,026,959 68,080	23,639,881 75,240	899,941 28,668	3.54 20.00	26. 2.
	TRANSPORTATION EQUIPMENT									
2.20	LIGHT TRUCKS		14-L2.5	10	6,096,666.67	3,906,438	1,580,562	141,994	2.33	11.
2.30	MEDIUM TRUCKS		17-L2.5	10	4,873,010.27	3,042,040	1,343,669	99,522	2.04	13.
2.40 2.50	HEAVY TRUCKS OTHER		20-R4 16-L2	10 10	3,098,038.40 1,680,103.22	1,477,241 764,833	1,310,993 747,260	86,722 68,600	2.80 4.08	15. 10.9
	TOTAL TRANSPORTATION EQUIPMENT				15,747,818.56	9,190,553	4,982,484	396,838	2.52	
3.00	STORES EQUIPMENT		25-SQ	0	222,353.15	43,386	178,967	8,895	4.00	20.
	TOOLS, SHOP AND GARAGE EQUIPMENT		20-SQ	0	3,414,564.99	1,408,340	2,006,225	170,613	5.00	11.
			15-SQ	0	160,329.45	60,441	99,889	10,690	6.67	9.3
5.00	LABORATORY EQUIPMENT LABORATORY EQUIPMENT - AMI		15-SQ	0	40.840.58	9.510	31.331	2.724	6.67	11.
5.00	LABORATORY EQUIPMENT - AMI		15-SQ	0	40,840.58	9,510	31,331	2,724	6.67	11.
94.00 95.00 95.12 96.40 96.50			15-SQ 24-S1 16-S0	0	40,840.58 2,250,127.78 1,979,057.51	9,510 2,078,213 1,321,527	31,331 171,915 657,531	2,724 11,584 57,753	6.67 0.51 2.92	11.: 14.: 11.:

	PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC		COMPOSITE REMAINING
DEPRECIABLE GROUP	DATE	CURVE	PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
TOTAL POWER OPERATED EQUIPMENT				4,229,185.29	3,399,739	829,446	69,337	1.64	

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
397.00	COMMUNICATION EQUIPMENT FULLY ACCRUED		FULLY A	CCRUED	29.12	29	0	0		-
	AMORTIZED		15-SQ	0	884,115.45	400,850	483,265	59,001	6.67	8.2
	TOTAL COMMUNICATION EQUIPMENT				884,144.57	400,879	483,265	59,001	6.67	
397.12	COMMUNICATION EQUIPMENT - AMI		15-SQ	0	19,942.47	4,649	15,293	1,330	6.67	11.5
TOTAL	GENERAL PLANT				50,261,857.69	17,612,689	32,344,236	1,648,085	3.28	
TOTAL (	GAS PLANT - WASHINGTON AND IDAHO				987,281,584.52	309,335,376	851,523,012	23,776,217	2.41	
GAS PL	ANT - ALLOCATED ALL									
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE		5-SQ	0	333,341.25	195,625	137,716	66,655	20.00	2.1
	TRANSPORTATION EQUIPMENT									
392.20 392.50	LIGHT TRUCKS OTHER		14-L2.5 16-L2	10 10	50,237.38 46,950.20	5,687 6,893	39,527 35,362	3,160 2,798	6.29 5.96	12.5 12.6
	TOTAL TRANSPORTATION EQUIPMENT				97,187.58	12,580	74,889	5,958	6.13	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		20-SQ	0	5,671,193.25	1,743,687	3,927,506	283,456	5.00	13.9
395.00 397.00	LABORATORY EQUIPMENT COMMUNICATION EQUIPMENT		15-SQ 15-SQ	0	233,215.60 282,919.85	106,892 123,150	126,324 159,770	15,546 18,869	6.67 6.67	8.1 8.5
	GAS PLANT - ALLOCATED ALL		10-04	0	6,617,857.53	2,181,934	4,426,205	390,484	5.90	0.0
	ANT - OREGON				0,017,037.33	2,101,334	4,420,203	550,404	5.50	
	L GAS STORAGE AND PROCESSING PLANT									
350.20	RIGHTS OF WAY		65-R4	0	668.75	24	645	12	1.79	53.8
330.20			05-R4	0	008.75	24	045	12	1.79	55.6
351.10	STRUCTURES AND IMPROVEMENTS STRUCTURES AND IMPROVEMENTS		55-R2.5	(5)	24,172.36	740	24,641	534	2.21	46.1
351.20	COMPRESSOR STATION		55-R2.5	(5)	264.37	60	218	5	1.89	43.6
351.40	OFFICE		55-R2.5	(5)	109,010.23	14,174	100,286	1,892	1.74	53.0
	TOTAL STRUCTURES AND IMPROVEMENTS				133,446.96	14,974	125,145	2,431	1.82	
352.00	WELLS STORAGE WELLS		60-R4	0	1,429,957.69	225,365	1,204,593	24,801	1.73	48.6
352.20	RESERVOIRS		50-R4	0	1,464,161.54	289,164	1,174,998	29,786	2.03	39.4
352.30	NON-RECOVERABLE GAS		50-R4	0	450,620.15	119,553	331,067	8,806	1.95	37.6
	TOTAL WELLS				3,344,739.38	634,081	2,710,658	63,393	1.90	
353.00	LINES		65-R4	0	170,744.96	20,080	150,665	2,787	1.63	54.1
354.00 355.00	COMPRESSOR STATION EQUIPMENT MEASURING AND REGULATING EQUIPMENT		55-R4 35-R3	0	3,235,659.23 151,373.35	737,036 95,213	2,498,624 56,160	59,068 1,643	1.83 1.09	42.3 34.2
356.00	PURIFICATION EQUIPMENT		35-S2.5	0	15,105.70	543	14,562	569	3.77	25.6
357.00	OTHER EQUIPMENT		45-R2	0	128,959.60	15,368	113,592	2,696	2.09	42.1
TOTAL	IATURAL GAS STORAGE AND PROCESSING PLANT				7,180,697.93	1,517,319	5,670,051	132,599	1.85	
DISTRIB	UTION PLANT									
374.40	LAND - EASEMENTS		60-R4	0	609,830.41	74,603	535,228	10,174	1.67	52.6
<mark>375.00</mark>	STRUCTURES AND IMPROVEMENTS		45-R2	0	671,976.30	97,332	574,644	17,232	2.56	33.3
376.00	MAINS		55-R3	(20)	269,917,387.93	78,205,577	245,695,289	5,693,794	2.11	43.2
378.00	MEASURING AND REGULATING EQUIPMENT - GENERAL		32-R2	(15)	6,117,036.85	1,525,043	5,509,549	245,758	4.02	22.4
379.00 380.00	MEASURING AND REGULATING EQUIPMENT - CITY GATE SERVICES		37-S0.5 <b>52-R3</b>	(15) (25)	3,349,996.01 130,250,005.03	608,442 47,528,304	3,244,054 115,284,202	107,754 <b>2,796,194</b>	3.22 <b>2.15</b>	30.1 <b>41.2</b>
381.00	METERS		35-R1	(23)	55,834,070.65	9.053.002	48.456.091	1,864,518	3.34	26.0
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPME	NT	65-R2.5	(15)	2,476,547.94	871,753	1,976,277	35,678	1.44	55.4
<mark>387.00</mark>			18-SQ	0	539.29	539	0	0	-	-
TOTAL	DISTRIBUTION PLANT				469,227,390.41	137,964,595	421,275,334	10,771,102	2.30	

		PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL AC	CRUAL	COMPOSITE
	DEPRECIABLE GROUP (1)	 (2)	CURVE (3)	PERCENT (4)	DECEMBER 31, 2021 (5)	RESERVE (6)	ACCRUALS (7)	AMOUNT (8)	RATE (9)=(8)/(5)	LIFE (10)=(7)/(8)
			.,							
GENER	AL PLANT									
390.10	STRUCTURES AND IMPROVEMENTS - COMPANY		30-R3	(5) 0	4,111,073.85	1,937,601	2,379,026	138,479	3.37	17.2
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE		5-SQ	0	12,222.51	6,111	6,112	2,445	20.00	2.5
392.20	TRANSPORTATION EQUIPMENT LIGHT TRUCKS		14-L2.5	10	3,285,771.20	1,271,000	1,686,194	180,854	5.50	9.3
392.30	MEDIUM TRUCKS		17-L2.5	10	1,181,335.73	642,544	420,659	34,201	2.90	12.3
392.50	OTHER		16-L2	10	230,653.00	41,739	165,849	13,500	5.85	12.3
	TOTAL TRANSPORTATION EQUIPMENT				4,697,759.93	1,955,283	2,272,702	228,555	4.87	
393.00	STORES EQUIPMENT		25-SQ	0	20,791.82	17,010	3,782	831	4.00	4.6
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		20-SQ 15-SQ	0	962,772.04	512,505	450,267	48,105	5.00	9.4
395.00 396.50	LABORATORY EQUIPMENT POWER OPERATED EQUIPMENT - OTHER		16-SQ	0	18,586.31 43,833.95	3,104 44,378	15,483 (544)	1,239 0	6.67	12.5
397.00	COMMUNICATION EQUIPMENT		15-SQ	0	766,396.89	417,995	348,402	51,090	6.67	6.8
398.00	MISCELLANEOUS EQUIPMENT									
	FULLY ACCRUED AMORTIZED		FULLY A	CCRUED 0	2,367.16 6,732.60	2,367 338	0 6,395	0 673	- 10.00	- 9.5
	TOTAL MISCELLANEOUS EQUIPMENT				9,099.76	2,705	6,395	673	7.40	
TOTAL	SENERAL PLANT				10,642,537.06	4,896,692	5,481,625	471,417	4.43	
	GAS PLANT - OREGON				487,050,625.40	144,378,605	432,427,010	11,375,118	2.34	
						· · · · · ·				
	DEPRECIABLE GAS PLANT				1,480,950,067.45	455,895,915	1,288,376,227	35,541,819	2.40	
соммо	N PLANT									
	LAND AND LAND RIGHTS								=	
389.30 389.40	REMOVING PROPERTY OF OTHERS LAND EASEMENTS		65-R4 65-R4	0	3,623,332.00 139,115.16	269,423 38,188	3,353,909 100,928	60,342 1,752	1.67 1.26	55.6 57.6
	TOTAL LAND AND LAND RIGHTS				3,762,447.16	307,610	3,454,837	62,094	1.65	
390.10	STRUCTURES AND IMPROVEMENTS - COMPANY		50-R2	(10)	159,324,485.81	14,881,363	160,375,571	3,907,317	2.45	41.0
	OFFICE FURNITURE AND EQUIPMENT			(	,,	,		-,,		
391.00	OFFICE FURNITURE AND EQUIPMENT		15-SQ	0	18,575,154.04	8,200,041	10,375,113	1,238,375	6.67	8.4
391.10	COMPUTER HARDWARE									
	FULLY ACCRUED AMORTIZED		FULLY A	CCRUED 0	491,370.77 60,938,463.23	491,371 31,980,000	0 28,958,463	0 12,188,335	20.00	- 2.4
			5-50	0						2.4
	TOTAL COMPUTER HARDWARE				61,429,834.00	32,471,371	28,958,463	12,188,335	19.84	
391.12 391.13	COMPUTER HARDWARE - AMI COMPUTER HARDWARE - MDM		5-SQ 5-SQ	0	4,963,598.74 2,637,348.63	3,366,842 2,110,000	1,596,757 527,349	992,720 527,349	20.00 20.00	1.6 1.0
	TOTAL OFFICE FURNITURE AND EQUIPMENT				87,605,935.41	46,148,254	41,457,682	14,946,779	17.06	
	TRANSPORTATION EQUIPMENT									
392.10	AUTOS		11-S2.5	10	84,739.91	124,957	(48,691)	0	-	-
392.20	LIGHT TRUCKS		14-L2.5	10	4,591,051.25	3,174,966	956,980	85,627	1.87	11.2
392.30	MEDIUM TRUCKS		17-L2.5	10	1,580,580.40	1,068,461	354,061	25,537	1.62	13.9
392.40 392.50	HEAVY TRUCKS OTHER		20-R4 16-L2	10 10	426,366.29 1,115,851.05	25,177 679,047	358,552 325,219	25,584 25,415	6.00 2.28	14.0 12.8
392.60	AIRPLANE		12-S1.5	30	6,566,805.81	3,824,370	772,394	89,088	1.36	8.7
	TOTAL TRANSPORTATION EQUIPMENT				14,365,394.71	8,896,979	2,718,515	251,251	1.75	
393.00	STORES EQUIPMENT		25-SQ	0	5,342,387.50	1,472,196	3,870,192	213,648	4.00	18.1
394.00 395.00	TOOLS, SHOP AND GARAGE EQUIPMENT LABORATORY EQUIPMENT		20-SQ 15-SQ	0	16,889,163.44 1,507,790.94	6,491,747 489,589	10,397,417 1,018,202	844,203 100,503	5.00 6.67	12.3 10.1
395.00			10-302	U	1,507,790.94	409,009	1,010,202	100,503	0.07	10.1
396.30	POWER OPERATED EQUIPMENT MEDIUM TRUCKS		16-L2	0	59,501.89	59,502	0	0	-	-
000.00				0	00,001.00	00,002	v	5		

		PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK	CALCULA ANNUAL ACC		COMPOSITE REMAINING
	DEPRECIABLE GROUP	DATE	CURVE	PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE	LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
396.50	OTHER		16-S0	0	1,930,686.55	1,371,845	558,842	62,577	3.24	8.9
	TOTAL POWER OPERATED EQUIPMENT				1,990,188.44	1,431,347	558,842	62,577	3.14	

	DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
	COMMUNICATION EQUIPMENT		15.00		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~					
397.00 397.12	COMMUNICATION EQUIPMENT AMI		15-SQ 15-SQ	0	93,404,872.21	31,936,150	61,468,722	6,228,381 502,392	6.67 6.67	9.9 11.7
397.12	PORTABLE		10-SQ	0	7,530,512.10 3,516,923.10	1,631,234 2,199,421	5,899,278 1,317,502	351,560	10.00	3.7
551.20	TORTABLE		10-00	0	3,310,323.10	2,133,421	1,517,502	331,300	10.00	5.7
	TOTAL COMMUNICATION EQUIPMENT				104,452,307.41	35,766,806	68,685,502	7,082,333	6.78	
398.00	MISCELLANEOUS EQUIPMENT		10-SQ	0	707,381.78	402,250	305,132	70,744	10.00	4.3
TOTAL [	DEPRECIABLE COMMON PLANT				395,947,482.60	116,288,140	292,841,892	27,541,449	6.96	
RESERV	E ADJUSTMENT FOR AMORTIZATION - ELECTRIC PLANT									
391.00	OFFICE FURNITURE AND EQUIPMENT					(120)		24	*	
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAR	RE				222,255		(44,451)		
391.12	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAR					(54,649)		10,930		
393.00	STORES EQUIPMENT					(33,298)		6,660	*	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT					(117,000)		23,400	*	
395.00	LABORATORY EQUIPMENT					286,400		(57,280)		
395.12	LABORATORY EQUIPMENT - AMI					40,100		(8,020)		
397.00	COMMUNICATION EQUIPMENT					(1,610,000)		322,000		
397.50	COMMUNICATION EQUIPMENT - SUB INTEGRATION					(284,000)		56,800		
397.60	COMMUNICATION EQUIPMENT - DISTRIBUTION					(8,452)		1,690		
398.00	MISCELLANEOUS EQUIPMENT					4,865		(973)	r*	
TOTAL F	RESERVE FOR AMORTIZATION - ELECTRIC PLANT					(1,553,899)		310,780		
RESERV	E ADJUSTMENT FOR AMORTIZATION - GAS PLANT - WASHINGT	ON AND IDAHO								
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAR	RE				161,492		(32,298)	*	
393.00	STORES EQUIPMENT					(3,250)		650	*	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT					(67,400)		13,480		
395.00	LABORATORY EQUIPMENT					19,568		(3,914)		
395.12	LABORATORY EQUIPMENT - AMI					(320)		64		
397.00	COMMUNICATION EQUIPMENT					(98,015)		19,603		
397.12	COMMUNICATION EQUIPMENT - AMI					(730)		146	r*	
TOTAL F	RESERVE FOR AMORTIZATION - GAS PLANT - WASHINGTON ANI	D IDAHO				11,345		(2,269)		
RESERV	E ADJUSTMENT FOR AMORTIZATION - GAS PLANT - ALLOCATE	D ALL								
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAR	RE				(23,872)		4,774	*	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT					163,400		(32,680)	*	
395.00	LABORATORY EQUIPMENT					1,450		(290)		
397.00	COMMUNICATION EQUIPMENT					(22,870)		4,574	*	
TOTAL F	RESERVE FOR AMORTIZATION - GAS PLANT - ALLOCATED ALL					118,108		(23,622)		
RESERV	E ADJUSTMENT FOR AMORTIZATION - GAS PLANT - OREGON									
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAR	RE				(39)		8	*	
393.00	STORES EQUIPMENT					(2,540)		508		
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT					136,761		(27,352)		
395.00	LABORATORY EQUIPMENT					(39)		8		
397.00	COMMUNICATION EQUIPMENT					274,597		(54,919)		
398.00	MISCELLANEOUS EQUIPMENT					(825)		165	*	
TOTAL F	RESERVE FOR AMORTIZATION - GAS PLANT - OREGON					407,915		(81,582)		

(1)         (2)         (3)         (4)         (6)         (6)         (7)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)         (70)         (8)		DEPRECIABLE GROUP	PROBABLE RETIREMENT DATE	SURVIVIOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE BOOK ACCRUALS	CALCULA ANNUAL AC AMOUNT		COMPOSITE REMAINING LIFE
91760       07762 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>(10)=(7)/(8)</th></td<>											(10)=(7)/(8)
91760       07762 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
B11:0       OPTICE FUNITURE AND DECOMPART       (1,82,220)**         B11:0       OPTICE FUNITURE AND DECOMPART       (1,82,220)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)** <td>RESERV</td> <td>E ADJUSTMENT FOR AMORTIZATION - COMMON PLANT</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	RESERV	E ADJUSTMENT FOR AMORTIZATION - COMMON PLANT									
B11:0       OPTICE FUNITURE AND DECOMPART       (1,82,220)**         B11:0       OPTICE FUNITURE AND DECOMPART       (1,82,220)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,82,20)**       (1,82,20)**         B12:0       TOTAL BUDGET AND DECOMPART       TOTAL BUDGET AND DECOMPART       (1,82,20)**       (1,82,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)**       (1,84,25,20)** <td>391.00</td> <td>OFFICE FURNITURE AND EQUIPMENT - OFFICE FURNITURE A</td> <td>ND EQUIPMENT</td> <td></td> <td></td> <td></td> <td>4,290,000</td> <td></td> <td>(858,000)</td> <td>**</td> <td></td>	391.00	OFFICE FURNITURE AND EQUIPMENT - OFFICE FURNITURE A	ND EQUIPMENT				4,290,000		(858,000)	**	
B11.0       BHCG FUNCTUREAU CURPACT       B10.207	391.10										
1300         1070005 CUMPART         11.000         0.01001         0.01001           1300         1070005 CUMPART         2.000         0.01001         0.01001           1300         100010001         0.01001         0.01001         0.01001         0.01001           1300         0.01001001         0.01001         0.01001         0.01001         0.01001         0.01001         0.01001           1300         0.01001001         0.00001         0.01001	391.12	OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWAF	RE - AMI				(249,166)				
B410         TDUEL SUCCEMPARATE EQUIPMENT         137200         (07.400) *           B400         LOGALLAGE EQUIPMENT         138200         (07.400) *           B4710         COMUNCATION EQUIPMENT         138200         (07.400) *           B4710         COMUNCATION EQUIPMENT         138120         (07.300) *           B4710         COMUNCATION EQUIPMENT         138120         (07.300) *           B4710         COMUNCATION EQUIPMENT         (07.300) *         (07.300) *           B4710         COMUNCATION EQUIPMENT         (07.300) *         (07.300) *           B4710         COMUNCATION EQUIPMENT         (07.300) *         (07.300) *           B4700         COMUNCATION EQUIPMENT         (07.300) *         (07.300) *           B4700         COMUNCATION EQUIPMENT         (07.300) *         (07.300) *           B4700         137.400 *         (07.400) *         (07.400) *           B4700         137.400 *         (07.400) *         (07.400) *           B4700         137.400 *         (07.300) *         (07.300) *           B4700         137.400 *         (17.400) *         (07.300) *           B4700         137.400 *         (17.400) *         (17.400) *           B4700         137.400 *			RE - MDM								
BASE 0       LARDBARDY FEDURENT AN OF THE CONTROL AND THE CONTROL AND											
9770       COMUNICACIONE DUPINENT       10,700,00 **         9770       COMUNICACIONE PUNICACIONE DUPINENT       10,700,00 **         9770 <td></td>											
137.1 COMMUNCTION CONTROL PORTAGE       (143.76)       (173.7 * * * * * * * * * * * * * * * * * * *											
1972 0.00MURLACITOR EQUIRABLY -PORTABLE         1511.60         (80238) **           1001 MISCELUCABOUS EQUIRABLY         7228.79         (1.446.98)           1001 A BESINE FOR AUXINITATION -COMMON PLANT         543.230.00         2207.991.23         189.74.46         2.90           1001 A DELECTER OF AUXINITATION -COMMON PLANT         543.235.000         2.207.991.23         189.74.46         2.90           1003 MISCELUARDUS STAURUPS         161.97.411         7.45.302.50         2.207.91.23         199.74.46         2.90           1003 MISCELUARDUS STAURUPS LEVANT - STAURUE - YAR LIFE         17.47.00.00.2         199.115 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1,700,000</td><td>**</td><td></td></t<>									1,700,000	**	
19.000         MISCELLANEOUS EQUIPMENT         (0.200)           TOTAL RESERVE FOR AMORTIZATION - COMMON PLANT         2.01,42         (0.200)           TOTAL RESERVE FOR AMORTIZATION - COMMON PLANT         2.41,25,046.07         2.227,97.04         6.569,247.23         108,754.44         2.40           MORTIZABLE AM DIANO - LECETRIC PLANT         4.44,255,046.07         2.207,97.04         6.569,247.23         108,754.44         2.40           100.00         RESERVE FOR AMORTIZATION - COMMON PLANT         4.44,255,046.07         2.207,97.04         5.569,247.25         108,754.44         2.40           100.00         RESERVE FOR AMORTIZATION - COMMON PLANT         4.44,255,048.07         2.207,310         108,754.44         2.40           100.01         RESERVE FOR AMORTIZATION - FOR MERCE         9.474.00         109,110											
Droal RESERVE FOR AMORTZATION - COMMON PLANT											
TOTAL GEPRECIABLE ELECTRIC, GAS AND COMMON PLANT         4.441,255,66.07         2.78         5.569,247,42         10,774,44         2,99           AMORTIZABLE AND LAND - ELECTRIC PLANT         9,740,053,98         15,174,11											
AMORTIZABLE AND LAND - ELECTRIC PLANT         46.740,033.84         15.137.411           10000         FRANCHESS AND CONSENTS         74.63.435.82         20.547.858.94           10010         MISCILLANEOUS INTANGER FLANT         15.137.411           10010         MISCILLANEOUS INTANGER FLANT         20.547.858.94         12.255.034           10011         MISCILLANEOUS INTANGER FLANT         20.547.858.94         12.255.034           10012         LAND         1.400.058.92         12.687.858.93         12.682.958           10012         LAND         1.588.975.79         1.588.975.79         1.588.975.79           10012         LAND         0.968FRX170N - HARTA         5.683.975.79         1.588.975.79           10012         LAND         1.588.975.79         1.588.975.79         1.588.975.79           10012         LAND         1.588.975.79         1.588.975.79         1.588.975.79           10011         LAND CONSERVATION - HARTA         1.588.975.79         1.588.975.79         1.588.975.79           10011         LAND CONSERVATION - FISHERES         1.798.786.93         1.797.806         1.598.975.79           10011         LAND CONSERVATION - FISHERES         2.789.0030         1.04.108         1.797.505           1011         LAND CONSERVATION -	TOTAL F	RESERVE FOR AMORTIZATION - COMMON PLANT					7,229,793		(1,445,958)		
0000         FRANCHEDS AND CONSENTS         46,740,038         15,17,11           0000         MISCELLANEONI MARGINE FLANT - SAFC VERU LFE         26,547,938,08         12,550,034           0001         MISCELLANEONI MARGINE FLANT - SAFC VERU LFE         27,87,938,08         12,550,034           0001         MISCELLANEONI MARGINE FLANT - SAFC VERU LFE         27,87,938,08         12,550,034           0001         MISCELLANEONI MARGINE FLANT - SAFC VERU LFE         27,87,938,08         12,520,034           0001         MISCELLANEONI MARGINE FLANT - SAFC VERU LFE         27,87,908         12,530,034           0001         15,530,221         0,27,87,908         12,331,40         (10,240)           0001         16,580,597,97         104,106         15,591,22         104,106           0001         100,000,500,000         15,592,72         104,106         105,597,27           0001         100,000,000,000,000         15,593,920         104,106         105,979,72           0001         100,000,000,000,000,000,000,000,000,000	TOTAL [	DEPRECIABLE ELECTRIC, GAS AND COMMON PLANT				6,541,255,908.07	2,297,891,258	5,556,247,428	189,794,456	2.90	
303.00       MISCELLANEOUS INTANGIE E PLANT       7.044.383.02       2.004.315         303.00       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE PLANT.       1.056.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.00000         303.01       MISCELLANEOUS INTANGIE PLANT.       7.056.000.95       10.00000000000000000000000000000000000	AMORTI	ZABLE AND LAND - ELECTRIC PLANT									
303.00       MISCELLANEOUS INTANGIE E PLANT       7.044.383.02       2.004.315         303.00       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE E PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE PLANT. SPON. OF PLATE       1.076.036.12       10.24.316         303.01       MISCELLANEOUS INTANGIE PLANT.       1.056.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.0000         303.01       MISCELLANEOUS INTANGIE PLANT.       1.080.036.95       10.00000         303.01       MISCELLANEOUS INTANGIE PLANT.       7.056.000.95       10.00000000000000000000000000000000000	302.00	EDANCHISES AND CONSENTS				46 740 052 09	15 137 /11				
303.10     MISCIELLANCIOUS INTANGIBLE PLANT - SOTT WARE - SYRAL LIFE     28.647.893.69     12.53.034       301.30     MISCIELLANCIOUS INTANGIBLE PLANT - SOTT WARE - SYRAL LIFE     1.788.001 12     189.10       301.30     LAND     4.53.022 10     2.777.065       302.20     LAND     6.000.99.50       302.20     LAND     7.000.000.90       303.00     LAND     2.044.30.50       303.00     METERS- WASHNOTON - RESERVE ADUSTRENT     2.040.000.90       303.00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
303.13       MISCELLANEOUS INTANGIBLE PLANT - SAAS - S YEAR LIFE       1.788.202.12       191.15         303.30       MISCELLANEOUS INTANGIBLE PLANT - SAAS - S YEAR LIFE       1.538.202.10       2.787.808         317.00       ARD       5.538.202.10       2.787.808         317.00       ARD       5.538.202.10       2.787.808         303.01       LAND - CONSERVATION - HABITAT       5.588.202.10       2.787.808         303.02       LAND - CONSERVATION - HABITAT       5.588.202.10       1.01.10         303.03       LAND - CONSERVATION - HABITAT       5.588.202.10       1.01.10         303.04       LAND - CONSERVATION - HABITAT       5.588.202.10       1.04.106         303.04       LAND - CONSERVATION - HABITAT       7.599.602.00       1.04.106         303.04       LAND - MORE TOR FUTURE USE       0.599.602       1.04.106         303.05       LAND - MORE TOR FUTURE USE       0.544.435.56       0.277.503         303.00       MAGUTES SA MURATON - RESERVE ADJUSTMENT       1.591.52.808.24       1.71.71.76         TOTAL AMORTIZABLE AND LAND - GAS PLANT - MASHINGTON AND IDAHO       2.807.10.665       1.04.10.71.71.76         SIGN MISCE PLANT - MASHINGTON AND IDAHO       3.894.64.43       1.77.509         SIGN MISCE PLANT - MASHINGTON AND IDAHO <td></td> <td></td> <td>IFE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			IFE								
131.02       LAND       3.30,227.19         137.00       ARD       15.058 22.21       2.77,78.06         138.10       LAND       15.058 22.21       2.77,78.06         139.22       LAND       15.058 22.21       104.106         139.23       LAND       05.167,77       104.106         139.25       LAND       05.167,77       104.106         140.00       104.00       05.05.9       104.106         150.01       LAND       05.05.9       104.106         150.01       104.010       2.389.387.0       70.78.05.05         150.01       104.010       2.389.387.0       747.59.0         150.01       104.010       2.389.387.0       747.59.0         150.02       STRUCTURES NAND IMPROVEMENTS - LEASTHOLD       2.389.387.0       747.59.0         150.01       MIDROTLABLE AND LAND - CAS PLANT - MASHINGTON AND IDAHO       2.589.387.0       747.59.0         150.01       MISCELLANE OLAND - CAS PLANT - MASHINGTON AND IDAHO       56.56.51.0       10.77.59.0 <tr< td=""><td></td><td>MISCELLANEOUS INTANGIBLE PLANT - SAAS - 5 YEAR LIFE</td><td></td><td></td><td></td><td>1,768,920.12</td><td></td><td></td><td></td><td></td><td></td></tr<>		MISCELLANEOUS INTANGIBLE PLANT - SAAS - 5 YEAR LIFE				1,768,920.12					
171.00       ARO       15,580,222,10       2,787,806         333.01       LAND       CONSERVATION - HABITAT       5,889,378,79         333.01       LAND       CONSERVATION - FBHERIES       11,01,014         333.02       LAND       6,895,959,96       11,01,014         333.02       LAND       6,895,959,97       11,01,014         333.02       LAND       53,661,22       104,105         334.02       LAND       53,661,22       104,105         347.00       75,861,22       104,105         347.00       75,861,22       104,105         350.01       ROIN PLOF OR WAY       73,861,22         350.02       LAND       6,345,301,21         350.02       LAND       2,359,387,70         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       37,860,0         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       2,359,387,70         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       37,250,00         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       386,850,10         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       386,850,20         350.02       STRUCTURES AND IMPROVEMENTS - LEASENDENT       386,854,30         350.02							642,365				
333.2       LAND       CONSERVATION - HABITAT       5.880,589 56         333.2       LAND       CONSERVATION - HABITAT       5.880,587,57         333.2.2       LAND       CONSERVATION - FISHERIES       1.328,773,54         333.2.4       LAND       CONSERVATION - FISHERIES       1.01,106         333.2.4       LAND       SIGE SIGE SIGE SIGE SIGE SIGE SIGE SIGE											
130 21     LAND - CONSERVATION - HABITAT     5.988.378.59       132 22     LAND     1,328.873.64     (79.240)       133 25     LAND     005.178.77       134 20     AND     005.178.77       137 0.0     ARO     35.181.62     104.106       360 21     LAND     005.178.77       37 0.0     ARO     35.181.62     104.106       380 20     LAND     95.44.433.86     104.106       380 21     LAND     0.85.178.77     104.106       380 20     LAND     0.85.178.79.00     104.106       380 21     LAND     0.85.181.62     104.106       380 20     LAND     0.85.187.80.00     107.39.00       380 20     STRUCTURES AND IMPROVEMENTS     185.182.808.24     13.71.768       380 20     STRUCTURES AND IMPROVEMENTS     173.23.00     747.683       380 20     STRUCTURES AND LAND - 64.87 LANT     185.182.808.24     13.71.716       380 20     STRUCTURES AND LAND - 64.87 LANT     173.23.00     747.683       380 20     STRUCTURES AND LAND - 64.87 LANT     173.23.00     747.683       380 20     STRUCTURES AND LAND - 64.87 LANT     173.23.00     747.683       380 20     MORTIZABLE AND LAND - 64.87 LANT     170.117.100     173.00       380 20     <							2,787,806				
330.22       LAND       CANSERVATION - FISHERIES       1,328,873.64       (79,240)         330.25       LAND - CONSERVATION - FISHERIES       1,328,873.64       (79,240)         330.26       LAND - CONSERVATION - FISHERIES       1,313.61,42       175,581.22         340.00       LAND       -35,151,42       104,106         350.01       LAND - EASEMENTS       5,544.433.56       104,106         350.01       LAND - EASEMENTS       365,665.50       (20,369,298)         350.01       LAND - EASEMENTS       365,665.50       (20,369,298)         350.02       LAND - MARDINGTON STANDARD - RESERVE ADJUSTMENT       365,665.50       (20,369,298)         350.01       LAND - MARDINGTON STANDARD - RESERVE ADJUSTMENT       365,665.50       (20,369,298)         350.01       LAND - MARDINGTON STANDARD - RESERVE ADJUSTMENT       365,665.50       (20,369,298)         350.01       LAND - MARDINGTON ATANDINDAD       2359,388.70       747,563         70714.       MARTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       179,4111.29       436,694         350.10       LAND       3071016.65       (4,107,087)         350.10       LAND       3071016.65       (4,107,087)         350.10       LAND       3071016.65       (4,107,087)											
330.25     LAD     4,113.031.49       330.45     LAD     75.841.22       330.45     LAD     90,175.77       330.20     LAD     90,175.77       330.20     LAD     72.061.005       380.21     LAD     205,175.77       380.20     LAD     205,175.77       380.21     LAD     205,107.77       380.20     LAD     205,403.59       380.21     LAD     6.944.33.56       380.20     LAD     203,989.70       380.20     LAD     203,989.70       380.20     LAD     203,989.70       380.20     LAD     205,989.70       380.20     LAD     45,689.4       380.20     LAD     45,689.4       380.20     LAD     45,689.4       380.20     LAD     45,689.4       380.00     MCRETA-MARTABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO     56,86,83.4       380.20     LAND     45,689.4       380.20     LAND     45,689.4       380.20     LAND     66,89.4.4       380.20<							(79,240)				
140.2.0.       LAND       905.176.77         347.00       ARG/HTS OF WAY       7.208.600.56         350.20       RIG/HTS OF WAY       7.208.600.56         350.11       LAND FLAD FOR FUTURE USE       0.544.433.50         360.20       STRUCTURES AND INSTON STANDARD - RESERVE ADJUSTMENT       0.201.00         380.20       STRUCTURES AND INSTON STANDARD - RESERVE ADJUSTMENT       (20.369.209.)         380.20       STRUCTURES AND IMPROVEMENTS - LEASEHOLD       2.369.380.70         707.11       LAND       - 477.503         707.12       MORTIZABLE AND LAND - RESERVE ADJUSTMENT       155,152.808.24         380.20       STRUCTURES AND IMPROVEMENTS - LEASEHOLD       1.794.111.29         490.20       STRUCTURES AND LAND - GAS PLANT - WASHINGTON AND IDAHO       1.794.111.29         490.20       LAND       - 435.494.70         387.20       LAND       - 437.204.00         387.20       LAND       - 435.494.70         387.20       LAND       - 435.494.70         387.20       LAND       - 435.494.70         387.20       LAND       - 435.494.43         387.20       LAND       - 638.948.70         387.20       LAND       - 638.948.70         387.20       LAND	330.25						(,				
347.00     AR0     335, 881, 82     104,108       350.20     RIGHTS OF WAY     72,08,600,508       380.11     LAND HELD FOR FUTURE USE     9,644,433,56       380.21     LAND     8,845,301,21       380.22     LAND     387,780,000       380.23     LAND     387,780,000       380.24     LAND     387,780,000       380.20     STRUCTURES AND IMPROVEMENTS - LEASEHOLD     2,359,388,70       747,663     747,663       703.00     MSCELLAMEOUS INTANGIBLE PLANT     15,152,280,24       39.01     LAND     436,894       39.01     LAND     436,894       39.01     LAND     638 PLANT - WASHINGTON AND IDAHO       39.01     LAND     638 PLANT - WASHINGTON AND IDAHO       39.01     LAND     638 PLANT - MASHINGTON AND IDAHO       39.01     LAND     638 PLANT - MASHINGTON AND IDAHO       39.01     LAND     648,696,63,04       39.02     LAND     638,966,63,04       39.01     LAND     638 PLANT - MASHINGTON AND IDAHO       39.02     LAND     638 PLANT - ALLOCATED ALL       39.01     LAND     638 PLANT - ALLOCATED ALL       39.01     LAND     638 PLANT - ALLOCATED ALL       39.01     LAND     638 PLANT - ALLOCATED ALL											
352.2     RIGHTS OF WAY     7,208,600.59       360.11     LAND HELD FOR FUTURE USE     9,544,335.6       360.20     LAND     8,545.30.121       360.50     LAND     8,565.10       370.30     METERS-WASHINGTON STANDARD - RESERVE ADJUSTMENT     0,2,559.308.70       370.31     METERS-WASHINGTON STANDARD - RESERVE ADJUSTMENT     0,2,559.308.70       370.32     STRUGTURES AND LAND - ELECTRIC PLANT     15,152,080.24       370.30     MISCELLANEOUS INTANGIBLE PLANT     1,794,111.29       370.30     MISCELLANEOUS INTANGIBLE PLANT     1,794,111.29       370.30     MISCELLANEOUS INTANGIBLE PLANT     3,071.016.65       370.30     MISCELLANEOUS INTANGIBLE PLANT - WASHINGTON AND IDAHO     3,071.016.65       370.30     MISCELLANEOUS INTANGIBLE PLANT - ALLOCATED ALL     1,349,683.44       370.10     MASCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE     450,194.49       370.10     MASCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE     450,194.49       370.10     MISCELLAND - GAS PLANT - ALLOCATED ALL     1,349,684.43       370.10     MISCELLAND - GAS PLANT - ALLOCATED ALL     1,349,684.43       370.10     MISCELLAND - GAS PLANT - ALLOCATED ALL     1,349,684.43       370.10     MISCELLAND - GAS PLANT - ALLOCATED ALL     1,349,684.43       370.10     MISCELLAND - GAS PLANT - ALLOCATED ALL											
380.11       LAND HELD FOR FUTURE USE       9,544,433,56         380.20       LAND       367,850.00         380.20       LAND       367,850.00         380.20       LAND       865,665.10         380.20       LAND       865,665.10         380.20       LAND       865,665.10         380.20       STAUCTURES AND IMPROVEMENTS - LEASEHOLD       845,685.10         390.20       STAUCTURES AND IMPROVEMENTS - LEASEHOLD       845,685.10         390.20       STAUCTURES AND IMPROVEMENTS - LEASEHOLD       155,152,888.24         390.20       STAUCTURES AND IMPROVEMENTS - LEASEHOLD       155,152,888.24         390.20       STAUCTURES AND LAND - GAS PLANT - WASHINGTON AND IDAHO       1794,111.29         390.30       MISCELLANEOUS INTANGIBLE PLANT       3.071,016.65         391.00       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,194,49         393.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,194,49         393.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,194,49       177,509         393.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,994,49,94       177,509         393.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       1,3498,584,43 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>104,106</td><td></td><td></td><td></td><td></td></td<>							104,106				
380.20       LAND       8.945,301.21         370.30       METERS - WASHINGTON STANDARD - RESERVE ADJUSTMENT       387.80.00         389.20       LAD       2.355,388.70         392.30       STRUCTURES AND IMPROVEMENTS - LEASEHOLD       2.355,388.70         TOTAL AMORTIZABLE AND LAND - ELECTRIC PLANT       155,152,806.24         303.00       MISCELLANEOUS INTANGIBLE PLANT       1794,111.29         303.00       MISCELLANEOUS INTANGIBLE PLANT       86,509.70         303.00       MISCELLANEOUS INTANGIBLE PLANT       3.071,016.65         303.00       MISCELLANEOUS INTANGIBLE PLANT       3.071,016.65         303.00       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       3.071,016.65         303.10       LAND       -435,986.43       177,509         303.10       LAND       -63S PLANT - ALLOCATED ALL       1,349,684.43       177,509         303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,194.49       177,509         303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       425,950.62       120,960         303.00       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       123,960,493,493,493,493,493,493,493,493,493,493											
360.50     LAND - EASEMENTS     367,850.0       387,30     METRS - WASHINGTON STANDARD - RESERVE ADJUSTMENT     23,367,850.0       389.20     LAND     23,398,87.0       389.20     LAND     23,39,88.70     747,563       TOTAL AMORTIZABLE AND LAND - ELECTRIC PLANT     155,152,08,24     13,717,176       AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO     11794,11129     436,894       303.00     MISCELLANEOUS INTANGIBLE PLANT     135,340.40     436,894       374.20     LAND     33,071.016.65     (4,107,087)       389.20     LAND     33,071.016.65     (4,107,087)       303.10     MISCELLANEOUS INTANGIBLE PLANT - WASHINGTON AND IDAHO     5,365,983.04     (3,670,193)       MORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO     5,365,983.04     (3,670,193)       MIRCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE     499,489.49     177,509       303.10     MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE     1349,684.43     177,509       303.10     MISCELLANEOUS INTANGIBLE PLANT - ALLOCATED ALL     1,349,684.43     177,509       AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL     1,349,684.43     177,509       AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL     1,349,684.43     177,509       30.10     LAND     59,923.87     120,960       30											
388.20         LAND         885.066.10         2.359.388.70         747.563           TOTAL AMORTIZABLE AND LAND - ELECTRIC PLANT         155.124.080.24         13,717,776           AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO         1.794,111.29         436.894           303.00         MISCELLANEOUS INTANGIBLE PLANT         81.504.00         413,240.40           303.00         MISCELLANEOUS INTANGIBLE PLANT         30.700,116.65         (4.107,087)           381.00         METERS - WASHINGTON - RESERVE ADJUSTMENT         30.701,016.65         (4.107,087)           381.00         METERS - WASHINGTON - RESERVE ADJUSTMENT         30.701,016.65         (4.107,087)           381.00         METERS - WASHINGTON - RESERVE ADJUSTMENT         30.701,016.65         (4.107,087)           381.00         METERS - WASHINGTON - RESERVE ADJUSTMENT         30.701,016.65         (4.107,087)           381.00         MISCELLAND - GAS PLANT - ALLOCATED ALL         30.701,016.65         (5.70,193)           AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL         1,349,684.43         177,509           393.10         LAND         689,489,94         177,509           393.10         LAND         425,590.62         120,960           304.00         LAND         59,923.87         120,960		LAND - EASEMENTS									
390.20       STRUCTURES AND IMPROVEMENTS - LEASEHOLD       2,359,388,70       747,563         TOTAL AMORTIZABLE AND LAND - ELECTRIC PLANT       155,152,808,24       13,717,776         AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       1.794,111,29       436,894         330.00       MISCELLANEOUS INTANGIBLE PLANT       1.794,111,29       436,894         330.10       LAND       1.794,111,29       436,894         330.10       MISCELLANEOUS INTANGIBLE PLANT       88,594,70       (4,107,087)         389.20       LAND       3.071,016.65       (4,107,087)         389.20       LAND       5.365,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5.365,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5.365,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1.30,10       1177,509         30.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - S YEAR LIFE       450,194,49       177,509         30.10       LAND       GAS PLANT - ALLOCATED ALL       1.349,684,43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1.349,684,43       177,509         30.00       MISCELLANEOUS INTANGIBLE PLANT       425,950,62       120,960			Г				(20,369,298)				
TOTAL AMORTIZABLE AND LAND - ELECTRIC PLANT         155,152,808.2         13,717,76           AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO         1794,111.29         436,894           303.00         MISCELLANEOUS INTANGIBLE PLANT         17,794,111.29         436,894           304.00         MISCELLANEOUS INTANGIBLE PLANT         64,594.70           381.00         METERS- WASHINGTON - RESERVE ADJUSTMENT         30,071,016.65           392.20         (4,107,087)           392.20         30,71,016.65           ANDORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO         5366,963.04           AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL         30,71,016.65           303.10         MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE         450,194.49           303.10         LAND         638 PLANT - ALLOCATED ALL           303.00         MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE         450,194.49           303.00         MISCELLANEOUS INTANGIBLE PLANT - ALLOCATED ALL         1,349,684.43         177,509           304.00         LAND         638 PLANT - ALLOCATED ALL         1,349,684.43         177,509           304.00         LAND         638,923.87         120,960         139,923.87           304.00         LAND         784.39         177,509 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO         303.00       MISCELLANEOUS INTANGIBLE PLANT       1,794,111.29       436,894         303.00       LAND       413,240.40       433,240.40         381.00       METERS - WASHINGTON - RESERVE ADJUSTMENT       0       4(107.087)         389.20       LAND       3.071.016.65       (4.107.087)         389.20       LAND       GAS PLANT - WASHINGTON AND IDAHO       5.366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5.366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       10       107,509         303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       899,489.94       177,509         303.10       LAND       GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         GMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         GMORTIZABLE AND LAND - GAS PLANT - OREGON       425,950.62       120,960         303.00       MISCELLANEOUS INTANGIBLE PLANT       425,950.62       120,960         304.00       LAND       784.49       121,944         374.20       271,781.794 <td></td> <td></td> <td></td> <td></td> <td></td> <td>2,359,388.70</td> <td></td> <td></td> <td></td> <td></td> <td></td>						2,359,388.70					
303.00       MISCELLANEOUS INTANGIBLE PLANT       1.794,111.29       436,894         350.10       LAND       13,240.40       413,240.40         374.20       LAND       88,594.70       88,594.70         381.00       MISTERS - WASHINGTON - RESERVE ADJUSTMENT       3.071.016.65       (4,107.087)         389.20       LAND       3.071.016.65       (4,107.087)         399.20       LAND       3.071.016.65       (3,670,193)         TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5.366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL         TOTAL AMORTIZABLE AND LAND - GAS PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         350.10       LAND       89,489.94       177,509         SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         350.10       LAND       6AS PLANT - ALLOCATED ALL       1.349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1.349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1.349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1.349,684.43       177,509         AMISCELLANEOUS INTANGI	TOTAL A	AMORTIZABLE AND LAND - ELECTRIC PLANT				155,152,808.24	13,717,176				
350.0       LAND       413,240.40         374.20       LAND       88,594.70         381.00       METERS - WASHINGTON - RESERVE ADJUSTMENT       0.071,016.65         389.20       LAND       3.071,016.65         TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5,366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         303.10       LAND       GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         4MORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         303.00       MISCELLANEOUS INTANGIBLE PLANT - OREGON       425,950.62       120,960         304.00       LAND       59,923.87       120,960         304.00       LAND       784.49       174.49         374.20       LAND       784.49       174.49	AMORTI	ZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO									
350.0       LAND       413,240.40         374.20       LAND       88,594.70         381.00       METERS - WASHINGTON - RESERVE ADJUSTMENT       0.071,016.65         389.20       LAND       3.071,016.65         TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5,366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         303.10       LAND       GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         4MORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         303.00       MISCELLANEOUS INTANGIBLE PLANT - OREGON       425,950.62       120,960         304.00       LAND       59,923.87       120,960         304.00       LAND       784.49       174.49         374.20       LAND       784.49       174.49	303.00	MISCELLANEOUS INTANGIBLE PLANT				1 704 111 20	436 894				
374.20       LAND       88,594.70         381.00       METERS - WASHINGTON - RESERVE ADJUSTMENT       3.071.016.65         399.20       LAND       3.071.016.65         TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5,366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450.194.49       177,509         350.10       LAND       2899.489.94							430,094				
389.20       LAND       3.071,016.65       1         TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5,366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450.194.49       177,509         350.10       LAND       899,489.94       177,509         TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - OREGON       1349,684.43       177,509         303.00       MISCELLANEOUS INTANGIBLE PLANT       639,923.87       120,960         304.00       LAND       59,923.87       120,960         374.20       TO44.49       784.49       174.49											
TOTAL AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND IDAHO       5,366,963.04       (3,670,193)         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         350.10       LAND       889,489.94       177,509         TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - OREGON       125,950.62       120,960         303.00       MISCELLANEOUS INTANGIBLE PLANT       59,923.87       120,960         304.00       LAND       59,923.87       120,960         304.00       LAND       784.49       174.49         374.20       127,817.94       121,717.94       121,717.94							(4,107,087)				
AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL          303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         350.10       LAND       899,489.94       177,509         TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - OREGON         303.00       MISCELLANEOUS INTANGIBLE PLANT       425,950.62       120,960         304.00       LAND       59,923.87       120,960         304.00       LAND       784.49       174.49         374.20       LAND       784.49       177,794	389.20	LAND				3,071,016.65					
303.10       MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5 YEAR LIFE       450,194.49       177,509         350.10       LAND       899,489.94       177,509         TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL       1,349,684.43       177,509         303.00       MISCELLANEOUS INTANGIBLE PLANT       425,950.62       120,960         304.00       LAND       59,923.87       784.49         374.20       LAND       784.49       217,817.94	TOTAL A	AMORTIZABLE AND LAND - GAS PLANT - WASHINGTON AND ID/	АНО			5,366,963.04	(3,670,193)				
350.10     LAND     899,489.94       TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL     1,349,684.43     177,509       AMORTIZABLE AND LAND - GAS PLANT - OREGON     425,950.62     120,960       303.00     MISCELLANEOUS INTANGIBLE PLANT     59,923.87       304.00     LAND     784.49       374.20     LAND     784.49       374.20     LAND     217,817.94	AMORTI	ZABLE AND LAND - GAS PLANT - ALLOCATED ALL									
TOTAL AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL     1,349,684.43     177,509       AMORTIZABLE AND LAND - GAS PLANT - OREGON     1349,684.43     177,509       303.00     MISCELLANEOUS INTANGIBLE PLANT     425,950.62     120,960       304.00     LAND     59,923.87       305.10     LAND     784.49       374.20     LAND     217,817.94			IFE				177,509				
AMORTIZABLE AND LAND - GAS PLANT - OREGON           303.00         MISCELLANEOUS INTANGIBLE PLANT         425,950.62         120,960           304.00         LAND         59,923.87           350.10         LAND         784.49           374.20         LAND         217,817.94											
303.00       MISCELLANEOUS INTANGIBLE PLANT       425,950.62       120,960         304.00       LAND       59,923.87         350.10       LAND       784.49         374.20       LAND       217,817.94	TOTAL A	AMORTIZABLE AND LAND - GAS PLANT - ALLOCATED ALL				1,349,684.43	177,509				
304.00         LAND         59,923.87           350.10         LAND         784.49           374.20         LAND         217,817.94	AMORTI	ZABLE AND LAND - GAS PLANT - OREGON									
350.10         LAND         784.49           374.20         LAND         217,817.94							120,960				
374.20 LAND 217,817.94											
	000.20					040,010.91					

		PROBABLE RETIREMENT	SURVIVIOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE BOOK			COMPOSITE REMAINING
	DEPRECIABLE GROUP	DATE		PERCENT	DECEMBER 31, 2021	RESERVE	ACCRUALS	AMOUNT	RATE (9)=(8)/(5)	LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(0)/(5)	(10)=(7)/(8)
TOTAL A	MORTIZABLE AND LAND - GAS PLANT - OREGON				1,549,993.83	120,960				

# TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC, GAS AND COMMON PLANT AS OF DECEMBER 31, 2021

	DEPRECIABLE GROUP         PROBABLE RETIREMENT         NET SURVIVIOR         NET SALVAGE           (1)         DATE (2)         CURVE (3)         PERCENT (4)				ORIGINAL COST AS OF DECEMBER 31, 2021 (5)	BOOK DEPRECIATION RESERVE (6)	FUTURE BOOK ACCRUALS (7)	CALCUL ANNUAL A AMOUNT (8)	COMPOSITE REMAINING LIFE (10)=(7)/(8)
AMORTIZ	ZABLE AND LAND - COMMON PLANT								
303.00 303.10 303.10 303.11 303.12 303.13 303.13 303.13 303.13 389.20	MISCELLANEOUS INTANGIBLE PLANT MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 2 YEAR LIF MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 3 YEAR LIF MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 15 YEAR MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 12. YEAR MISCELLANEOUS INTANGIBLE PLANT - SAAS - 2 YEAR LIFE MISCELLANEOUS INTANGIBLE PLANT - SAAS - 3 YEAR LIFE MISCELLANEOUS INTANGIBLE PLANT - SAAS - 3 YEAR LIFE MISCELLANEOUS INTANGIBLE PLANT - SAAS - 5 YEAR LIFE LAND	E E IFE (COMPASS)			$\begin{array}{c} 6,416,550.79\\ 321,950.47\\ 7,429,923.59\\ 174,435,158.14\\ 100,831,203.22\\ 30,329,509.30\\ 67,095.71\\ 595,584.50\\ 6,554,460.92\\ 10,148,559.81\\ \end{array}$	4,759,832 57,006 576,601 94,998,734 47,502,940 10,189,359 18,582 56,688 496,413			
TOTAL AMORTIZABLE AND LAND - COMMON PLANT					337,129,996.45	158,656,155			
TOTAL ELECTRIC, GAS AND COMMON PLANT					7,041,805,354.06	2,466,892,865			

\* LIFE SPAN PROCEDURE WAS USED. CURVE SHOWN IS INTERIM SURVIVOR CURVE. \*\* 5-YEAR AMORTIZATION OF RESERVE RELATED TO AMORTIZATION ACCOUNTING.

NOTE: FUTURE ADDITIONS FOR IDAHO AMI METERS WILL USE A RATE OF 7.03% BASED ON A 15-S2.5 SURVIVOR CURVE AND (2) NET SALVAGE PERCENT.

### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 015

DATE PREPARED:05/15/2023WITNESS:Jeff WebbRESPONDER:Paul GoodDEPT:Natural GasTELEPHONE:(208) 769-1EMAIL:Paul.Good(

Jeff Webb Paul Good Natural Gas Delivery (208) 769-1368 Paul.Good@avistacorp.com

### **REQUEST:**

Please state the number of new main lines installed in the last ten years to connect new customers. Please provide this information in the form of total number of main lines per year and their length.

### **RESPONSE:**

Avista does not track the number of new main lines installed in relation to new customers, however, we do track the total length of new main pipe installed, which may serve both new and existing customers. The table below provides the length of new main installed for the past ten years. The lengths include mains installed as part of our pipeline replacement programs, replacements required by road construction and mains replaced due to damage caused by others (excavation). The portion of mains installed to serve new customers is a portion of the total length of main installed.

Year Installed	Length of Main Feet	Length of Main Miles
2013	117,561.48	22.27
2014	127,709.36	24.19
2015	195,202.66	36.97
2016	219,804.69	41.63
2017	188,227.62	35.65
2018	171,845.00	32.55
2019	140,350.83	26.58
2020	146,091.10	27.67
2021	104,859.50	19.86
2022	122,103.39	23.13

### **BEFORE THE PUBLIC UTILITY COMMISSION**

# **OF OREGON**

# UG 461

In the Matter of	)
AVISTA CORPORATION, dba AVISTA UTILITIES,	) ) )
Request for a General Rate Revision.	) )

# **REDACTED OPENING TESTIMONY**

# OF GREER RYAN

# ON BEHALF OF SIERRA CLUB AND CLIMATE SOLUTIONS

July 7, 2023

# TABLE OF CONTENTS

I.	INTRO	DDUCTION AND SUMMARY	3
II.		TA IS IMPROPERLY CHARGING RATEPAYERS FOR ITS POLITICAL /ITY EXPENSES TO UNDERMINE CLIMATE POLICIES	7
	A.	LITIGATION EXPENSES TO UNDERMINE THE CLIMATE PROTECTION PROGRAM	7
	B.	ASSOCIATION DUES	16
	C.	STAFF EXPENSES AND SALARIES RELATED TO POLITICAL ACTIVITIES	32
III.		TA IS IMPROPERLY CHARGING RATEPAYERS FOR TOTIONAL AND INSTITUTIONAL ADVERTISING EXPENSES	35
	А.	ADVERTISING AND RELATED EMPLOYEE COSTS	35
IV.	CONC	LUSION	40

2

3

4

5

19 20

21

22

23

1

# I. INTRODUCTION AND SUMMARY

### **Q.** Please state your name and position.

A. My name is Greer Ryan. I am the Clean Buildings Policy Manager with Climate
 Solutions, a regional 501(c)(3) nonprofit supporting clean energy solutions to the climate
 crisis.

# 6 **Q.** Please describe your education and employment background.

A. I hold a B.S. in Molecular Environmental Biology from the University of California,
Berkeley and an M.S. in Environmental Science from the School of Public and
Environmental Affairs at Indiana University. Before working at Climate Solutions, I was
a Senior Energy Policy Analyst in the Energy Justice program at the Center for
Biological Diversity, a national nonprofit.

# 12 Q. Please state your experience with energy regulation and proceedings before public 13 utility commissions.

# A. I have approximately 9 years of experience reviewing, analyzing, and advocating for local, state, and federal energy and climate policies and regulations. My work has included analyzing how rate structures, in conjunction with state and local policies, encourage or discourage the adoption of energy efficiency and clean energy resources. For more information, please see my resume attached.

Of particular relevance to this proceeding:

 I have engaged in a number of Oregon PUC proceedings, including intervening and providing testimony in UG 435 (NW Natural Rate Case), 2178 (Natural Gas Fact-Finding Investigation), and LC 79 (NW Natural IRP).

OPENING TESTIMONY OF GREER RYAN UG 461

0	In OPUC Docket No. UG 435, I provided testimony regarding improper
	accounting practices by NW Natural which resulted in charging ratepayers for the
	company's political activities and its promotional advertising costs. In Order No.
	22-388, the Commission deducted \$356,106 from rates due to NW Natural's
	improper allocation of political activity expenses to ratepayers, and approved a
	negotiated \$1 million reduction in advertising expenses as reasonable because
	such expenses ultimately went toward promotional campaigns miscategorized as
	"informational."
0	In OPUC Docket No. UM 2178 (Natural Gas Fact-finding Investigation), I wrote

extensive comments on behalf of over 30 environmental, climate, and energy justice organizations highlighting the gas industry's efforts to 1) roll back the state's Climate Protection Program<sup>1</sup> and 2) drive a future energy system heavily reliant on continued gas system expansion and alternative fuels without sufficiently considering electrification, energy efficiency, and other non-pipe alternatives.<sup>2</sup>

 In OPUC Docket No. LC 79 (NW Natural IRP), I participated alongside other environmental, climate, and energy groups to outline risks in NW Natural's plan, as they had not done a sufficient analysis to demonstrate that their long-term plan is in line with state climate goals. In its decision (Written Order forthcoming), the Commission shared many of our concerns, did not acknowledge NW Natural's long-term plan, and required NW Natural to come back with an IRP Update.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

<sup>&</sup>lt;sup>1</sup> See <u>https://edocs.puc.state.or.us/efdocs/HAC/um2178hac82230.pdf</u> at 1.

<sup>&</sup>lt;sup>2</sup> See, e.g., *id.* at 5.

•	I have provided testimony before the North Carolina Utilities Commission (NCUC) on
	behalf of the Center for Biological Diversity and Appalachian Voices in Duke Energy
	Carolinas, LLC's Application for Adjustment of Rates and Charges applicable to Electric
	Service in North Carolina. My testimony raised issues related to costs associated with
	fossil fuel generation in the climate change context, grid improvement plan expenses,
	costs associated with climate-exacerbated storms, and charges to customers for dues and
	payments to outside entities engaged in lobbying activities (NCUC Docket 1214).
•	I co-authored a Petition for Rulemaking to the Federal Energy Regulatory Commission to
	amend the Uniform System of Accounts' Treatment of Industry Association Dues (FERC
	Docket RM21-15-000). The Petition requests FERC place industry association dues in an

account that is presumptively non-recoverable to ensure the burden is on utilities to demonstrate that ratepayer money going to industry associations is not used for political activities which may be counter to the public interest. The Petition is currently pending at FERC.

#### Q. What materials did you review in preparing this testimony?

I have reviewed the opening testimony filed by Avista on March 1, 2023, and I have A. reviewed the exhibits included with my testimony.

#### Q. What is the purpose of your testimony, and how is your testimony organized?

A. In the first section of my testimony, my purpose is to raise concerns about political influence activities for which Avista seeks recovery from ratepayers, both directly and indirectly. Avista has incurred significant litigation costs challenging the Climate Protection Program in Oregon, and it seeks recovery from ratepayers for this activity. Litigation to undermine Oregon's signature climate law that requires gas utilities to

OPENING TESTIMONY OF GREER RYAN UG 461

decarbonize their operations is exactly the type of political activity Avista is prohibited from recovering from ratepayers.

Additionally, Avista pays industry association dues to the American Gas Association (AGA) and the Northwest Gas Association (NWGA). These trade groups have repeatedly been shown to engage in political and promotional activity. Such activity represents a significant proportion of their expenditures, likely far beyond the small proportion the groups report as "lobbying" in tax documents under the Internal Revenue Code's narrow definition. Expenditures for these types of activities would not be directly recoverable by Avista, and it is concerning that similar expenditures by third parties could be passed on to ratepayers in the form of Avista's association dues.

Finally, Avista uses staff time and related staff expenses for political activities. Ultimately, ratepayers should not be forced to pay for political activities that they do not agree with.

The second section of my testimony indicates that there are potentially inappropriate advertising expenditures that Avista seeks to recover from ratepayers. Both Oregon state law and federal law governing the activities of utilities limit the recovery of advertising intended to promote use of an energy utilities' service. Avista has failed to provide a foundation for why its advertising expenses for promoting gas appliances or its promotional advertising related to renewable natural gas (RNG) should be passed on to ratepayers. For the same reasons, staff expenses and salaries associated with such advertising should not be recoverable from ratepayers.

OPENING TESTIMONY OF GREER RYAN UG 461

# II. <u>AVISTA IS IMPROPERLY CHARGING RATEPAYERS FOR ITS POLITICAL</u> <u>ACTIVITY EXPENSES TO UNDERMINE CLIMATE POLICIES</u>

# A. LITIGATION EXPENSES TO UNDERMINE THE CLIMATE PROTECTION PROGRAM.

# Q. What is the Climate Protection Program?

1 2

3

4

5

17

18

19

20

6 7		The Climate Protection Program ("CPP") is a regulation adopted by the Department of
/	A.	The Chinate Protection Program (CPP) is a regulation adopted by the Department of
8		Environmental Quality, in compliance with Executive Order 20-04, that sets a declining
9		limit, or cap, on greenhouse gas emissions from fossil fuels used throughout Oregon,
10		including diesel, gasoline, natural gas, and propane, used in transportation, residential,
11		commercial, and industrial settings. The program also regulates site-specific greenhouse
12		gas emissions at manufacturing facilities, such as emissions from industrial processes,
13		with a best available emissions reductions approach.
14	Q.	Is Avista required to reduce its emissions pursuant to the Climate Protection
15		Program?
16	A.	As explained in Avista's 2023 Gas Utility Integrated Resource Plan, Avista must reduce

# A. As explained in Avista's 2023 Gas Utility Integrated Resource Plan, Avista must reduce its greenhouse gas emissions by 50% below averaged 2017-2019 levels by 2035, and 90% below averaged 2017-2019 levels by 2050.<sup>3</sup>

# Q. Why did the Department of Environmental Quality adopt the Climate Protection Program?

A. Governor Brown directed the Department of Environmental Quality ("DEQ") and the
Environmental Quality Commission ("EQC") to take action to cap and reduce
greenhouse gas emissions to the extent possible under their existing authority (EO 2004). DEQ and EQC then began an exhaustive public process to develop rules to regulate

<sup>3</sup> Ex. Avista/402, Holland/109-10, Avista's 2023 Natural Gas IRP.

greenhouse gas emissions, with engagement from the public, stakeholders, and regulated entities. Consistent with the governor's directive and the legislature's broad grant of authority to regulate air pollution, EQC adopted the CPP rules in December 2021.

Climate change is the defining environmental challenge of our time. In Oregon, the effects of a warming planet are clear. Our state faces increased wildfire danger, increased drought, reduced snowpack, reduced water supplies, and a rising ocean, all of which disrupt the daily lives of Oregonians across the state. Those effects—while widespread—do not impact the state evenly. Often, they disproportionally affect communities that are already disadvantaged.

The CPP is designed to reduce the detrimental effects of greenhouse gas emissions on the overall public welfare through planned emissions reductions, while also providing a voluntary funding mechanism for the equitable distribution of the benefits of green development to environmental justice communities disproportionately impacted by climate change and air pollution. These communities are specifically prioritized in the CPP's voluntary funding mechanism because they otherwise may not experience the benefits of a clean fuel economy, further exacerbating the inequities environmental justice communities have faced in the climate crisis.

Q. Is the Climate Protection Program subject to litigation?

A. Yes. On March 18, 2022, NW Natural, Avista Utilities, and Cascade Natural Gas filed a lawsuit against DEQ in the Oregon Court of Appeals, asking the court to vacate the Climate Protection Program regulation.<sup>4</sup> In this litigation, Avista Utilities is represented by the law firms of 1) Baker Botts and 2) Snell & Wilmer.

<sup>4</sup> Ex. Environmental Intervenors/331.

OPENING TESTIMONY OF GREER RYAN UG 461

**Q**.

### Is Climate Solutions also a party to this lawsuit?

- A. Yes. Climate Solutions has intervened in the case to defend the Climate Protection
   Program.
- 4 0

1

2

3

5

6

7

8

19

20

### Q. What remedy is Avista asking for in its litigation?

A. Avista is asking the Court of Appeals to invalidate the Climate Protection Program regulation.

# Q. If Avista is successful in overturning this regulation in court, how will that affect Oregonians, and individuals who live in the company's service territory?

9 A. The Climate Protection Program is one of the primary laws driving significant 10 greenhouse gas emissions reductions in Oregon. Invalidating this regulation could mean 11 that Oregon fails to achieve its GHG reduction targets, which would have devastating 12 impacts on the climate and in turn on all Oregonians-including individuals who live and work in Avista's service territory. It would mean that major emitters of GHG pollution, 13 14 not only Avista, would no longer be responsible for mitigating GHG pollution pursuant to the timeline and requirements of the Climate Protection Program. It would also 15 16 significantly reduce the Community Climate Investment (CCI) funding mechanism 17 available for environmental justice and other directly impacted communities to make 18 energy efficiency and clean energy upgrades.

# Q. What is Avista's role as a party in the lawsuit challenging the Climate Protection Program?

A. Avista is a petitioner, meaning it is the party asking the Court of Appeals to review and
invalidate the Climate Protection Program.

OPENING TESTIMONY OF GREER RYAN UG 461

A. Avista is asking ratepayers to pay for the legal fees it incurs to petition the Court of
Appeals to overturn the Climate Protection Program.

How is Avista paying for its petition to overturn the Climate Protection Program?

**Q.** How much has Avista incurred in legal fees to date for this lawsuit?

A. Avista has employed two law firms, Baker Botts and Snell & Wilmer, "in connection
with the CPP litigation."<sup>5</sup> To date, Avista has incurred \$40,771.91 in legal fees for Baker
Botts, and \$11,179.22 in legal fees for Snell & Wilmer. In total, Avista has already
charged ratepayers \$51,951 in legal fees for its affirmative lawsuit to overturn the
Climate Protection Program.

# 10 Q. What financial information is Avista required to disclose to the Commission 11 regarding its expenses?

- 12 The Federal Energy Regulatory Commission ("FERC") has created a Uniform System of A. 13 Accounts, and gas utilities with interstate operations are required to annually file their 14 financial statements with FERC consistent with this accounting system. By regulation, FERC determines which accounts may be billed to ratepayers and which must be billed to 15 16 shareholders. Oregon has adopted FERC's accounting system to regulate its public utilities and to set fair, just, and reasonable rates.<sup>6</sup> As a regulated entity, Avista must 17 disclose its transaction record for costs billed to regulated accounts, for which it seeks 18 19 reimbursement from ratepayers.
- 20 21

1

4

Q.

Q. How do you know that Avista is charging ratepayers for legal fees related to its litigation to overturn the CPP?

<sup>5</sup> Ex. Environmental Intervenors/303, EG DR 25.

OPENING TESTIMONY OF GREER RYAN UG 461

<sup>&</sup>lt;sup>6</sup> OAR 860-027-0055(1).

A. Avista billed these legal fees to a regulated FERC account for which it seeks recovery from ratepayers. Avista has provided transaction details for all non-labor costs recorded to regulated FERC accounts for the Base Year.<sup>7</sup> Avista categorized its litigation costs to invalidate the Climate Protection Program as "005 Legal Services" and sought recovery for \$135,794 in legal services for the Base Year.<sup>8</sup> Specifically, Avista listed its invoices from Baker Botts and Snell & Wilmer in this transaction data and billed these costs to FERC Account 923.<sup>9</sup> According to FERC regulations, costs billed to this account should include, "the fees and expenses of professional consultants and others for general services with the exception of fees and expenses for outside services of Account 928, Regulatory commission expenses[.]" <sup>10</sup>

Avista confirmed that it seeks recovery for its CPP litigation costs that it billed to FERC Account No. 923, and it is further requesting additional funds in this rate case to finance its litigation efforts.<sup>11</sup> Avista stated that it billed ratepayers for all costs included in FERC Account No. 923, including its CPP litigation costs.<sup>12</sup> In total, Avista billed customers "approximately \$1.6 million" for costs in FERC Account No. 923, and is asking for \$1.8 million to cover its costs for this account during the test year in this rate case.<sup>13</sup> Avista's test year costs for FERC Account No. 923 mirror its base year costs, but

<sup>8</sup> Ex. Environmental Intervenors/305, Staff DR 57 Attachment A – Excerpts Baker Botts.

<sup>9</sup> *Id*.

<sup>10</sup> 18 C.F.R. § 367.9230.

<sup>11</sup> Ex. Environmental Intervenors/306, EG DR 66.

<sup>12</sup> *Id*.

 $^{13}$  *Id*.

OPENING TESTIMONY OF GREER RYAN UG 461

 <sup>&</sup>lt;sup>7</sup> Ex. Environmental Intervenors/304, Staff DR 57; Ex. Environmental Intervenors/305, Staff DR 57 Attachment A – Excerpts Baker Botts.

(206) 343-7340

are increased by a test period expense adjustment.<sup>14</sup> Since CPP litigation costs were 1 included in the base year costs for FERC Account No. 923, these costs were already 2 3 billed to ratepayers. Further, since these costs are included in the test year budget, that means Avista is asking for additional funding to cover its CPP litigation costs during the 4 test year as well.<sup>15</sup> 5 6 Q. Can Avista recover costs for its political activities from ratepayers? 7 A. I am not a lawyer, and I provide the below information for context only. 8 In Oregon, the Commission prohibits utilities from recovering the costs of their 9 political activities from ratepayers. The Commission has held that: Ratepayers should not be required to contribute to the advancement of 10 political positions in which they may not believe. Exclusion of political 11 12 expenditures is even more important than exclusion of community affairs expenditures because a utility's lobbying program can actually harm 13 ratepayers. Stockholder interests with respect to issues such as the nature 14 15 and scope of regulation often conflict with ratepayer interests. A utility's lobbying program can be expected to give preference to stockholder 16 interests when issues such as those arise.<sup>16</sup> 17 FERC regulations also provide that costs related to a utilities' political activities must be 18 billed to shareholders.<sup>17</sup> 19 Q. Can Avista recover the cost of its affirmative litigation to undermine the Climate 21 **Protection Program from ratepayers?**  $^{14}$  *Id*. <sup>15</sup> *Id*. <sup>16</sup> Re Pac. Nw. Bell Tel. Co., Am. Network, Inc., et al., UT 43, Order No. 87-406, 82 P.U.R. 4th 293, 320 (Mar. 31, 1987) (emphasis added). <sup>17</sup> 18 CFR § 367.4264. OPENING TESTIMONY OF GREER RYAN Earthiustice 810 Third Ave. Suite 610 UG 461 Seattle, WA 98104

20

A.

No. While a utility may recover costs for its representation before regulatory bodies, such as the Oregon Public Utilities Commission, it cannot recover costs associated with its petition to the Court of Appeals to undermine state climate law. Costs related to proceedings before regulatory commissions must be billed to FERC Account No. 928.<sup>18</sup> However, the Court of Appeals is not a regulatory commission. It is part of the judicial branch of government.

Further, unlike regulatory cases before the Commission, Avista's lawsuit against the Climate Protection Program is an effort to undermine and vacate a statewide law that applies to numerous sectors and creates benefits for environmental justice communities. This lawsuit is exactly the kind of political activity that harms ratepayers—especially residential ratepayers—because it seeks to undermine an important measure that would reduce GHG emissions to avoid climate catastrophe and that would directly help ratepayers through clean energy upgrades and energy efficiency benefits.

# Q. Is there any other reason to disallow recovery of Avista's litigation costs to vacate the Climate Protection Program?

A. Allowing recovery of Avista's CPP litigation costs is contrary to the Commission's obligation to set fair, just, and reasonable rates; to limit expenses to those with a close nexus to a utility's legitimate costs of business; and to safeguard the public interest. The obligation to set fair rates and safeguard the public interest includes an obligation to

<sup>&</sup>lt;sup>18</sup> "This account must include all expenses, properly included in service company operating expenses, incurred by the service company in connection with formal cases before regulatory commissions, or other regulatory bodies, on its own behalf or on behalf of associate companies, including payments made to a regulatory commission for fees assessed to the service company for pay and expenses of such commission, its officers, agents and employees, and for filings or reports made under regulations of regulatory commissions." 18 C.F.R. § 367.9280.

regulate utility ratemaking in a manner that encourages utilities to reduce their GHG emissions consistent with statewide GHG emission reduction goals. Allowing recovery for litigation costs to undermine Oregon's signature climate law is contrary to the public interest and the interest of utility customers.

Pursuant to Executive Order No. 20-24, the Commission has an obligation to "exercise any and all authority and discretion vested in them by law to help facilitate Oregon's achievement of the GHG emissions reduction goals" set forth in ORS 468A.205(1)(c).<sup>19</sup> Specifically, "[i]t is *in the interest of utility customers and the public* generally for the utility sector to take actions that result in rapid reductions of GHG emissions[.]"<sup>20</sup> This means the Commission should "[p]rioritize proceedings and activities, to the extent consistent with other legal requirements, that advance decarbonization in the utility sector, and exercise its broad statutory authority to reduce GHG emissions[.]"<sup>21</sup>

Further, given that the Climate Protection Program aims to mitigate the impacts of climate change in environmental justice communities, efforts to overturn this program directly and adversely harms these ratepayers. When setting rates, the Commission should consider "differential energy burdens on low-income customers and other economic, social equity or environmental justice factors that affect affordability for certain classes of utility customers, and any other reasonable consideration." ORS § 757.230(1). Taking these considerations into account, the Commission should deny

OPENING TESTIMONY OF GREER RYAN UG 461

<sup>&</sup>lt;sup>19</sup> Oregon Executive Order 20-04, at 5, <u>https://www.oregon.gov/gov/eo/eo\_20-04.pdf</u>.
<sup>20</sup> *Id.* at 8 (emphasis added).

 $<sup>^{21}</sup>$  *Id*.

recovery of Avista's litigation expenses to overturn the Climate Protection Program, as this litigation directly harms the interests of ratepayers. Q. Is there any other evidence relevant to showing that Avista's litigation against the **CPP** would harm ratepayer interests? A. A survey conducted by Avista of its customers documented that many care about responding to and taking action on climate change. Here are a few responses from Avista's ratepayers:<sup>22</sup> "I do everything I can to reduce pollution, waste, climate change, global warming, drought and disasters even though miniscule and a little more costly it is a necessary effort, for my world, my country, humanity and posterity." "Ultimately we'd like to be completely off all fossil fuel energy sources. But for now, this is our next best option." "Climate change requires all of us to do our part to save the planet." "We all have to change the way, amount of, and kind of energy we use, or life as we know it, is slowly coming to an end which will impact our children and grandchildren in unimaginable ways. The earth's resources to support humans is not in any way shape or form sustainable. America wastes more energy than most other countries use."

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

<sup>&</sup>lt;sup>22</sup> All responses included below are taken from EG DR 2, Attachment D, Ex. Environmental Intervenors/307 and 308.

#### Should the Commission allow Avista to recover costs associated with its litigation to 1 Q. 2 vacate the Climate Protection program?

A. No. Avista's lawsuit against the Climate Protection Program is a political activity, and asking ratepayers to fund the costs of this lawsuit would require them to support a litigation position that directly undermines their interests. Further, allowing Avista to 6 recover these costs would be contrary to the Commission's obligation to regulate in the public interest by reducing the impact of utility service on climate change consistent with statewide GHG reduction targets. Further, it would set bad precedent to allow recovery, because NW Natural and Cascade Natural Gas will likely also request reimbursement 10 from ratepayers for their litigation costs in their next rate case.

#### 0. What action should the Commission take to deduct these costs?

12 The Commission should deduct \$51,951 from the test year budget for FERC Account No. A. 13 923 to deduct costs already billed to ratepayers during the base year. Further, the Commission should deduct an additional \$55,000 from the test year budget to eliminate 14 any funding for CPP litigation costs during the test year. Lastly, the Commission should 15 16 order that Avista is not allowed to recover costs for its litigation to vacate the Climate 17 Protection Program, and should further order that any such expenses be billed to FERC Account 426.4.<sup>23</sup> 18

19

20

3

4

5

7

8

9

11

#### B. **ASSOCIATION DUES**

#### What are industry association fees or dues? Q.

<sup>&</sup>lt;sup>23</sup> This account includes "[e]xpenditures for certain civic, political and related activities." 18 CFR § 367.4264.

1 A. Industry association dues are charges that members pay to be part of an association.

These are paid on a recurring basis, often annually. Dues are then used by the association to cover its employee, activity, and overhead expenses.

4 Q. How much has Avista paid for its industry association dues?
5 A. Avista has contributed

2

3

14

in dues to the American Gas Association (AGA) in 2022 and 6 in 2023.<sup>24</sup> Avista paid 7 8 in annual membership dues to the Northwest Gas Association (NWGA).<sup>25</sup> 9 Could you please provide a brief description of the associations you mentioned in 10 Q. 11 response to the previous question? 12 A. The AGA is a national industry association that represents over 200 gas supply 13

companies.<sup>26</sup> NWGA is a trade organization operating in the Pacific Northwest focused on the natural gas industry.<sup>27</sup>

Q. What expenses related to association fees or dues is Avista seeking to recover from
 its Oregon ratepayers?

<sup>24</sup> Ex. Environmental Intervenors/319, EG DR 67C Confidential Attachment A.

<sup>&</sup>lt;sup>25</sup> Ex. Environmental Intervenors/320, EG DR 67C Confidential Attachment B.

<sup>&</sup>lt;sup>26</sup> American Gas Association, *About AGA*, <u>https://www.aga.org/about/</u> (last accessed June 30, 2023).

<sup>&</sup>lt;sup>27</sup> Northwest Gas Association, *About*, <u>https://www.nwga.org/</u> (last accessed June 30, 2023).

A. Avista allocated \$80,611 for AGA and \$2,698 for NWGA to Oregon. Avista indicates it is seeking to recover 75% of these dues. This results in charges of \$60,458 for AGA and \$2,024 for NWGA that are passed on to ratepayers.<sup>28</sup>

**Q.** How has the PUC typically treated association fees or dues?

A. I am not a lawyer, and I state the following only for context.

The Oregon PUC does not have set rules for how it analyzes association fees or dues. In prior dockets, OPUC has indicated that it "generally allows" 75% of association dues.<sup>29</sup> However, the Commission has previously indicated concern that industry associations like AGA made "significant expenditures" for nonrecoverable activities such as promotion and marketing and thus a great proportion of dues might be disallowed in other rate cases.<sup>30</sup>

**Q.** Why should the Commission disallow recovery of trade association dues?

A. As explained above, the Commission and FERC prohibit the use of ratepayer funding for political activities. This is because customers should not be required to support causes in

<sup>30</sup> *Id*.

<sup>&</sup>lt;sup>28</sup> Ex. Environmental Intervenors/310, EG DR 21 Attachment A, tab M&D-1, (see "Charged to Oregon"). Confusingly, in its response to EG DR 68, Ex. Environmental Intervenors/311, Avista claims that the "system de minimis amount" of AGA dues is \$60,458, with the "Oregon share" being \$19,000. Avista does not indicate what the difference between "Charged to Oregon" and "Oregon Share" are, nor does it indicate what the "Oregon share" for the other membership dues would be. Additionally, in its response to EG DR 21, Avista lists in another tab the initial larger totals as "sum of Gas South Amount Type," indicating these are charges allocated to Oregon. Ex. Environmental Intervenors/310, EG DR 21 Attachment A, tab M&D-2. Avista's responses are contradictory, but whatever the total amounts, the concern over charging such costs to ratepayers, detailed in the rest of this section of testimony, is the same.

<sup>&</sup>lt;sup>29</sup> In the Matter of Revised Tariff Schedules Filed by Northwest Natural Gas Company for a General Rate Increase, 1989 WL 1793934 (Or. P.U.C.), at \*10.

	which they do not believe and because utility lobbying can actually harm	a ratepayers. <sup>31</sup>
	Industry associations including AGA and NWGA have engaged in wides	pread partisan
	and political activity to promote the consumption of gas and to prohibit a	ction by local,
	state, and federal governments to respond to climate change. The Comm	ission should
	prohibit recovery of industry association dues to prevent ratepayers from	indirectly
	contributing to political activities contrary to their interests.	
Q.	What type of organization is the AGA, and is it allowed to engage in	political
	activity under IRS rules?	
A.	The AGA is a 501(c)(6) organization, meaning it is exempt from paying	taxes because it
	is a business league. <sup>32</sup> According to IRS guidance, business leagues may	engage in the
	following political activities:	
	Organizations described in IRC $501(c)(4)$ , $(c)(5)$ , and $(c)(6)$ may an <i>unlimited amount of lobbying</i> , provided that the lobbying is relations organization's exempt purpose	
	IRC 501(c)(4), (c)(5), and (c)(6) organizations may engage in campaigns on behalf of or in opposition to candidates for pub provided that such intervention does not constitute the organ primary activity	olic office
	IRC 501(c) organizations may generally make expenditures for campaign activities if such activities (and other activities not furt exempt purposes) do not constitute the organization's primary activities	thering its
18 Cl <sup>32</sup> Ex <sup>33</sup> Int (c)(5) tege/o OPEN	FR § 367.4264. . Environmental Intervenors/312, AGA Form 990 at 1. ernal Revenue Service, Political Campaign and Lobbying Activities of IRC ), and (c)(6) Organizations, at 4-5 (2003) (emphasis added), <u>https://www.irsectopic103.pdf</u> . NING TESTIMONY OF GREER RYAN	501(c)(4),
	A. <sup>31</sup> In 1 <sup>32</sup> Ex <sup>33</sup> Int (c)(5) tege/0 OPEN	<ul> <li>Industry associations including AGA and NWGA have engaged in wides and political activity to promote the consumption of gas and to prohibit a state, and federal governments to respond to climate change. The Commiprohibit recovery of industry association dues to prevent ratepayers from contributing to political activities contrary to their interests.</li> <li>Q. What type of organization is the AGA, and is it allowed to engage in activity under IRS rules?</li> <li>A. The AGA is a 501(c)(6) organization, meaning it is exempt from paying is a business league.<sup>32</sup> According to IRS guidance, business leagues may following political activities:</li> <li>Organizations described in IRC 501(c)(4), (c)(5), and (c)(6) may an <i>unlimited amount of lobbying</i>, provided that the lobbying is relations's exempt purpose</li> <li>IRC 501(c)(4), (c)(5), and (c)(6) organizations may engage in campaigns on behalf of or in opposition to candidates for pub provided that such intervention does not constitute the orgation primary activity</li> <li>IRC 501(c) organizations may generally make expenditures for campaign activities if such activities (and other activities not further activities in the organization is found on the provide of the such activities (and other activities not further activities in the provide is organization.)</li> </ul>

# 1 || Q. How much of the AGA's operating expenses comes from membership dues?

A. In 2021, the AGA earned a total revenue of \$35,694,026 from all its revenue sources,
 with membership dues providing \$28,579,115.<sup>34</sup>

**Q.** Could you please describe AGA's political advocacy?

2

3

4

5

6

7

8

9

10

11

12

13

14

15

A. AGA regularly engages in lobbying and other political advocacy. AGA disclosed well over \$1 million in federal lobbying each year in 2019, 2020, and 2021.<sup>35</sup> Further, the AGA is a registered political action committee.<sup>36</sup> As a political action committee, AGA donated approximately \$200,000 to federal political candidates during the 2022 election , the majority of which went to the Republican party and its candidates.<sup>37</sup> The AGA also made financial contributions to political action committees for the Republican and Democratic parties.<sup>38</sup>

AGA also engages in a host of controversial political advocacy that is not specifically categorized by utilities as lobbying, including:

- Supporting nationwide construction permits that risk environmental damage;
- Actively participating in litigation seeking to lessen environmental protections;

<sup>&</sup>lt;sup>34</sup> Ex. Environmental Intervenors/312, AGA Form 990 at 1, 9.

<sup>&</sup>lt;sup>35</sup> Open Secrets, *Client Profile: American Gas Assn*, <u>https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2021&id=D000000447</u> (last visited June 30, 2023).

<sup>&</sup>lt;sup>36</sup> American Gas Ass'n, GASPAC, <u>https://www.aga.org/gaspac/</u>.

<sup>&</sup>lt;sup>37</sup> Open Secrets, *American Gas Assn PAC Contributions to Federal Candidates*, <u>https://www.opensecrets.org/political-action-committees-pacs/american-gas-assn/C00007450/candidate-recipients/2022</u>.

<sup>&</sup>lt;sup>38</sup> Open Secrets, *American Gas Assn PAC to PAC/Party*, <u>https://www.opensecrets.org/political-action-committees-pacs/american-gas-assn/C00007450/pac-to-pac/2022</u>.

1	• Opposing changes to the International Code Council's codes – codes that are widely
2	adopted around the world – that would have made electric vehicle-ready wiring and
3	accommodations for electric-powered appliances an automatic feature of new buildings;
4	• Promoting the gas economy and associated infrastructure, despite the critical need to
5	phase out reliance on fossil fuels as we move to a clean energy economy, including:
6	• Advocating for the increased development of new gas pipeline infrastructure;
7	• Coordinating campaigns to mislead the public regarding the climate costs of natural
8	gas;
9	• Creating "educational" materials for children claiming gas is a "very safe energy
10	source," despite its negative public health impacts that disproportionately harm
11	children;
12	• Fighting local electrification ordinances that would prohibit gas heating and
13	appliances in new buildings; and
14	• Supporting members' advocacy efforts in favor of state legislation that would
15	preemptively prohibit local building electrification ordinances, including for public
16	universities. <sup>39</sup>
17	AGA stated its 2020 objective was to "expand efforts at the federal, state, and
18	local levels" to block transitions away from fossil fuels. <sup>40</sup> Some of these efforts include
19	spreading misinformation about the public health impacts of gas cooking, going so far as
	<sup>39</sup> <i>See</i> Ex. Environmental Intervenors/313, FERC Petition Exhibit B, at Ryan/1-2 (exhibit to the Center for Biological Diversity's petition requesting classification of membership dues as a political expenditure).
	<sup>40</sup> Jeff Brady & Dan Charles, <i>As Cities Grapple with Climate Change, Gas Utilities Fight to Stay in Business</i> , NPR (Feb. 22, 2021), <u>https://www.npr.org/2021/02/22/967439914/as-cities-grapple-with-climate-change-gas-utilities-fight-to-stay-in-business</u> .

1

2

3

4

5

6

7

8

9

10 11

12

13

14

15

16

17

18

19

<sup>&</sup>lt;sup>41</sup> Jeff Brady, *Gas Stove Makers Have a Pollution Solution*, NPR (Feb. 4, 2023), <u>https://www.npr.org/2023/02/04/1149736969/gas-stove-makers-have-a-pollution-solution-theyre-just-not-using-it</u>; Hiroko Tabuchi, *In the Fight Over Gas Stoves, Meet the Industry's Go-To Scientist*, (Jan. 29, 2023), <u>https://www.nytimes.com/2023/01/29/climate/gas-stove-health.html</u>.

<sup>&</sup>lt;sup>42</sup> Ex. Environmental Intervenors/314, AGA Gas Stove Report.

<sup>&</sup>lt;sup>43</sup> AGA, 2020 Form 990 at p. 2, <u>https://www.documentcloud.org/documents/21115897-2020-american-gas-association-irs-form-990</u>.

<sup>&</sup>lt;sup>44</sup> Brady & Charles, *supra* n.40.

ratepayers; for instance, AGA participates in Department of Energy rulemakings to prevent more stringent appliance efficiency standards.<sup>45</sup>

AGA engages in promotional advertising designed to promote the continued use of fossil gas. It has run ads on social media websites promoting gas as environmentally friendly and "clean,"<sup>46</sup> and has recruited social media influencers to promote natural gas usage through a "#cookingwithgas campaign."<sup>47</sup>

# Q. Does AGA's engage in political advocacy in Oregon?

Yes. According to a recording captured by Washington Post reporters, AGA plans to contribute \$4 million to an anti-electrification campaign in Eugene.<sup>48</sup>

AGA has also financially supported other industry associations like the Edison

Electric Institute (EEI) and front groups such as Partnership for Energy Progress, which

aggressively challenge electrification efforts through political advocacy-including in

Oregon.<sup>49</sup> Besides political advocacy, these other associations and front groups promote

https://www.facebook.com/ads/library/?active\_status=all&ad\_type=all&country=US&view\_all\_page\_id=140877979844&search\_type=page&media\_type=all.

<sup>47</sup> Rebecca Leber, *There's Something Different About the New Gas Stove Influencer*, Vox (Mar. 10, 2023), <u>https://www.vox.com/climate/2023/3/10/23628286/gas-stove-influencer-propane</u>.

<sup>48</sup> Anna Phillips, *A Fight Brewing In Oregon Could Decide How We Heat Our Homes and Cook*, Washington Post (Apr. 21, 2023), <u>https://www.washingtonpost.com/climate-</u> environment/2023/04/21/natural-gas-industry-oregon-ban/.

<sup>49</sup> Ex. Environmental Intervenors/312, AGA, 2021 Form 990 at Ryan/29 (payment to "Partners for Energy Progress" and to "Coloradans for Energy Access"),
 <u>https://www.documentcloud.org/documents/21115897-2020-american-gas-association-irs-form-990</u>; *see also* Energy and Policy Institute, *Partnership for Energy Progress*,
 <u>https://energyandpolicy.org/partnership-for-energy-progress/</u> (last accessed June 25, 2023).

<sup>&</sup>lt;sup>45</sup> *E.g.*, Joint Comments on the Proposed Rulemaking on Energy Conservation Standards for Consumer Furnaces, DOE Docket No. EERE-2014-BT-STD-0031 (Oct. 6, 2022), <u>https://www.regulations.gov/comment/EERE-2014-BT-STD-0031-0391</u>.

<sup>&</sup>lt;sup>46</sup> AGA Facebook ads,

and advertise natural gas use to the public. For instance, focusing its efforts on the Northwest, Partnership for Energy Progress has spent at least \$206,046 as of June 30, 2 2023, on Facebook advertising that promotes natural gas.<sup>50</sup> 3 4 Q. Could you please describe NWGA's political advocacy? 5 A. NWGA engages in a variety of political influence activities, including lobbying. These 6 activities and goals are outlined in part in NWGA's Employee Handbook: 7 8 In order to accomplish its mission, the NWGA will focus its resources on 9 activities that most effectively support the advocacy message by implementing 10 the following strategies: 11 12 1. Persuasively tell its members' story about the long-term role of gas in 13 meeting society's low carbon policy goals. Win the policy battle. • Argue the counter message to the "zero carbon" and "Electrification 14 mandate" movements. Articulate a pathway to Deep Decarbonization that 15 leverages the benefits of natural gas. 16 • Raise the awareness and appreciation for the value of low-cost long-term 17 supply availability. 18 19 • Build regional support for a Renewables and Natural Gas partnership as an effective strategy for the PNW region in addressing climate change. 20 21 2. Translate this story into specific lobbying forums to influence public policy 22 in practical ways as directed by its membership. • Pro-actively introduce legislation as guided by NWGA's members. 23 • Represent members' collective position on prospective carbon pricing 24 legislation. 25 26 • Intervene to take advantage of public policy driven funding and subsidies 27 that benefit NWGA's members. [...]<sup>51</sup> <sup>50</sup> Partnership for Energy Progress Facebook ads,

1

https://www.facebook.com/ads/library/?active status=all&ad type=all&country=US&view all page id=107500120800840&sort data[direction]=desc&sort data[mode]=relevancy monthly g rouped&search type=page&media type=all (using "ad library report" tool to search for all dates since 2018 and total cost of advertising).

<sup>&</sup>lt;sup>51</sup> See Ex. Coalition/408 from Testimony in NW Natural Rate Case, UG 435, https://edocs.puc.state.or.us/efdocs/HTB/ug435htb16597.pdf, at Coalition/408, Ryan/33 (page 653 of pdf).

Additionally, NWGA has openly stated it would fight local and state attempts to address climate change by phasing out fossil fuels, committing \$1 million to the effort in Washington alone.<sup>52</sup>

### Q. Does NWGA engage in political advocacy in Oregon?

Yes. NWGA has directly lobbied against critical climate policies in Oregon. For instance, NWGA attempted to influence the outcome of the Climate Protection Program 2022 Temporary Rulemaking (OAR 340-271-0110).<sup>53</sup> NWGA spends significant time weighing in on individual bills at the Oregon legislature. As one recent example, NWGA unsuccessfully lobbied against the recently-passed 2023 Climate Resilience package (HB 3409) at the Oregon legislature, urging lawmakers to vote "no."<sup>54</sup>

Further, NWGA's Executive Director filed to create the NW Coalition for Energy Choice,<sup>55</sup> a front group that campaigned to kill HB 3152 ("Utility Customer Protection Bill") in the 2023 Oregon legislative session with strategies that included spreading misinformation about the bill's impacts. HB 3152 would have disallowed utilities from recovering the cost of gas line extension allowances and incentives for gas appliances from existing ratepayers and was supported by Climate Solutions and the Citizens Utility

<sup>54</sup> Ex. Environmental Intervenors/315. Dan Kirschner (NWGA's director) also submitted comments earlier in the session on the set of bills:
 <u>https://olis.oregonlegislature.gov/liz/2023R1/Downloads/PublicTestimonyDocument/65565</u>.

<sup>&</sup>lt;sup>52</sup> <u>https://www.seattletimes.com/seattle-news/natural-gas-industrys-1-million-pr-campaign-sets-up-fight-over-northwests-energy-future/.</u>

<sup>&</sup>lt;sup>53</sup> <u>https://www.nwga.org/\_files/ugd/054dfe\_7de9ee2c2d7f4662855a008ef9bb2cdf.pdf</u>

<sup>&</sup>lt;u>https://egov.sos.state.or.us/br/pkg\_web\_name\_srch\_inq.do\_name\_srch?p\_name=&p\_regist\_nbr=</u>194526498&p\_srch=PHASE1&p\_entity\_status=ACTINA.

Board. To fight it, this front group founded by NWGA's Executive Director lobbied against this bill through emails and social media posts, claiming the bill would "limit[] home energy choice."<sup>56</sup>

Q. Has Avista provided information that justifies charging ratepayers 75% of the costs associated with its industry association dues?

A. No. Avista indicates in a conclusory fashion that 75% of national and regional trade organization dues can be recovered.<sup>57</sup> When asked in a subsequent request to provide justification for the proportion of expenses Avista seeks to recover from customers, the company refers back to the conclusory statement in EG DR 21 without further elaboration.<sup>58</sup>

# Q. Is there anything Avista specifically cites to support its claim that 75% of association dues are spent on permissible activities?

A. Avista has provided only one document—a dues invoice—that briefly addresses the AGA's use of dues.

The AGA invoice includes at the bottom of the dues page

<sup>56</sup> Ex. Environmental Intervenors/316.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

- <sup>57</sup> Ex. Environmental Intervenors/310, EG DR 21 Attachment A, M&D-1.
- <sup>58</sup> Ex. Environmental Intervenors/317, EG DR 22.

OPENING TESTIMONY OF GREER RYAN UG 461

	It is notable that the lobbying figure is premised upon an outdated definition of lobbying
	that excludes local lobbying (which is no longer excluded under the current Internal
	Revenue Code). <sup>60</sup> Thus, even AGA's own estimation of the percentage of dues
	attributable to lobbying activities may be incorrect. More importantly, the narrow IRC
	definition of lobbying—specifically to be used in tax contexts, not utility regulatory
	contexts-does not capture the full array of political advocacy and promotional activity
	that utilities are prohibited from charging to their ratepayers in Oregon. <sup>61</sup>
	Other than this notice, Avista has presented no evidence in support of its claim
	that only a nominal portion of its AGA membership dues are used for political activities.
•	Q. What information can be gleaned from the AGA's Form 990 for filing year 2021
	regarding the extent of the AGA's political activities as a portion of its budget?
	A. Analysis of AGA's Form 990 for 2021 indicates that this organization spends a
	substantial portion of its budget on gas promotion and political activities. First, one of
	AGA's principal purposes is to engage in political activities to promote the interests of
	member organizations. <sup>62</sup> AGA likely has an entire department dedicated to "government

<sup>&</sup>lt;sup>59</sup> Ex. Environmental Intervenors/319 EG DR 67C Confidential Attachment A – AGA, (emphasis in original).

<sup>&</sup>lt;sup>60</sup> Compare Omnibus Budget Reconciliation Act of 1993, H.R. 2264, 103rd Cong. § 13222 (1993-94) (codified as amending 26 U.S.C. § 162(e)) (excluding local lobbying), with 26 U.S.C. § 162(e)(3), 491(e)(2); see also Act of Dec. 22, 2017, Pub. L. No. 115-97, 131 Stat. 2054 § 13308 (codified as amending 26 U.S.C. § 162(e)) (repealing local legislation exemption).

<sup>&</sup>lt;sup>61</sup> See Re Pac. Nw. Bell Tel. Co., Am. Network, Inc., et al, UT 43, Order No.87-406, 82 P.U.R. 4th 293, 320 (Mar. 31, 1987) (including "lobbying and similar political activities").

<sup>&</sup>lt;sup>62</sup> Ex. Environmental Intervenors/312, Form 990 at Ryan/2 (referring to section 4b, "Government Relations").

relations," which is led by Vice President George Lowe. It also likely has an entire department dedicated to gas promotion, led by its vice president of advocacy and outreach. <sup>63</sup> The total expenses for AGA in 2021 were \$35 million and, of this total, executive compensation, salary, and benefits costs comprised \$20.8 million.<sup>64</sup> AGA also retained the support of outside law firms in the amount of \$339,177, and professional lobbyists in the amount of \$523,036, likely to provide professional legal support regarding its "government relations" activities.

AGA spent \$232,335 on political campaigns to support elected officials or political parties including the Democratic Governor's Association and the Republican State Leadership Committee. Of this total, only \$34,000 came from outside contributions with the rest of these costs were paid for by the AGA itself.<sup>65</sup>

The AGA also directly supported local political organizations, industry advocacy organizations, and charitable organizations—none of which are recoverable costs under Oregon's restrictions on political activities. The AGA provided direct grants, in the amount of \$629,065, and enrolled in memberships and sponsorships, in the amount of \$764,190. Grantees included: African American Mayors Association, American Petroleum Institute, Boy Scouts of America, Coloradans for Energy Access, Congressional Hispanic Caucus, Democratic Governors' Association, Independent Petroleum Association of America, National Association of Counties, National Energy and Utility Affordability Coalition, National Governor's Association, NCSL Foundation

<sup>65</sup> *Id.* at Ryan/14.

 $<sup>^{63}</sup>$  Id. at Ryan/8.

<sup>&</sup>lt;sup>64</sup> *Id.* at Ryan/10.

for State Legislatures, Partners for Energy Progress (\$75,000), and the Western Governor's Association.<sup>66</sup>

# Q. In light of Oregon's strict prohibition against financing political activities using ratepayer funds, how would you recommend the Commission treat AGA and NWGA association dues?

A. The Commission should disallow recovery of AGA and NWGA membership dues from ratepayers. Avista has failed to carry its burden to prove these costs are just and reasonable to allocate to ratepayers. The limited evidence provided by Avista directly contradicts evidence in the Form 990 filed by the AGA with the IRS regarding the extent of political activities conducted by this organization. Further, both the AGA and NWGA engage in extensive advocacy and promotion efforts to undermine public health and environmental protections, using funding derived from member dues. In the absence of any evidence presented by Avista in rebuttal, the Commission should disallow cost recovery as contrary to the public interest.

Q. How have other public utilities commissions or state jurisdictions treated membership dues to industry associations including the AGA?

A. Other state utility commissions have disallowed charging trade association dues to

ratepayers when utility applicants failed to provide evidence regarding dues usage. For

instance, California's PUC has

specifically barred ratepayer funding of membership activities such as: legislative advocacy; legislative policy research; regulatory advocacy (lobbying); regulatory policy research; advertising; marketing; utility operations and engineering; finance, legal planning, and customer service; public relations; and general administrative overhead,

<sup>66</sup> *Id.* at Ryan/29-31.

OPENING TESTIMONY OF GREER RYAN UG 461 Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

1

and therefore denied allocating such costs to ratepayers where a utility provided insufficient detail to determine whether such activities were included in association dues.<sup>67</sup> Similarly, the Kentucky Public Service Commission denied recovery of Edison Electric Institute (EEI) dues where a utility failed to prove such costs should be recoverable and because EEI engaged in "regulatory advocacy and public relations."<sup>68</sup>

Colorado, Connecticut, Maine, and New York have passed laws prohibiting utilities from charging customers for recovering dues for associations that engage in lobbying or similar political activities.<sup>69</sup> Recognizing the concern over utilities' ability to skirt accountability through the activities of third parties, FERC is currently examining its accounting treatment of industry association dues and certain civic, political, and related expenses, prompted by concerns over the lack of transparency and oversight associated with such expenses.<sup>70</sup>

# Q. Are there any other membership fees and dues that Avista seeks to recover from Oregon ratepavers?

<sup>67</sup> D.20-07-038, Order Modifying Decision 19-09-051 and Denying Rehearing, as Modified, at 6-7 (July 20, 2020),

https://docs.cpuc.ca.gov/publisheddocs/published/G000/M344/K013/344013426.pdf.

<sup>68</sup> Case No. 2020-00350, Order, at 28-30 (Ky. Pub. Serv. Comm'n, June 30, 2021), https://psc.ky.gov/pscscf/2020%20Cases/2020-00350//20210630\_PSC\_ORDER.pdf.

<sup>69</sup> S.B. 23-291, Reg. Sess. 2023 (Colorado 2023),

https://leg.colorado.gov/sites/default/files/2023a\_291\_signed.pdf; S.B. 1556, Reg. Sess. 2021-2022 (N.Y. 2021), https://legislation.nysenate.gov/pdf/bills/2021/S1556; S.P. 146 – L.D. 324, Spec. Sess. 2023 (Maine 2023), http://www.mainelegislature.org/legis/bills/getPDF.asp?paper=SP0146&item=5&snum=131; S.B. 7, Reg. Sess. 2023 (Connecticut 2023).

https://www.cga.ct.gov/2023/ACT/PA/PDF/2023PA-00102-R00SB-00007-PA.PDF.

<sup>70</sup> FERC, *Rate Recovery, Reporting, and Accounting Treatment of Industry Association Dues and Certain Civic, Political, and Related Expenses,* 86 Fed. Reg. 72958 (Dec. 23, 2021). Opened in response to Center for Biological Diversity Petition, Docket No. RM21-15-000 (Mar. 17, 2021).

OPENING TESTIMONY OF GREER RYAN UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

Yes. Avista has allocated "other" memberships and dues to Oregon totaling \$11,890. 1 A. Avista seeks recovery of 20% of these costs, amounting to \$2,378.71 These "other" 2 3 memberships include the Builders Association of Southern Oregon, various economic development associations, rotary clubs, the Western Labor and Management Public 4 5 Affairs Committee, and a historical society; some of the membership lines include the names of individuals.<sup>72</sup> 6 7 Are "other" membership dues recoverable from ratepayers? Q. 8 A. The Commission disallows recovery of expenses related to "charities, community affairs, and economic development organizations.<sup>73</sup> 9 Q. What evidence has Avista provided that 20% of "other" association fees should be 10 11 recoverable from ratepayers? Avista has not provided justification for its request to recover 20% of "other" association 12 A. fees from ratepayers. Avista recognizes that "other" memberships and dues are 13 disallowed unless it shows these amounts are shown to be just and reasonable.<sup>74</sup> Avista 14 then seeks to justify these amounts by stating that this proportion reflects amounts related 15 16 to staff membership for professional organizations related to their duties, but transaction 17 descriptions for these fees do not reflect that reasoning. The transaction descriptions 18 demonstrate these organizations are "charities, community affairs, and economic

<sup>&</sup>lt;sup>71</sup> Ex. Environmental Intervenors/310, EG DR 21 Attachment A, tab M&D-1.

<sup>&</sup>lt;sup>72</sup> Ex. Environmental Intervenors/310, EG DR 21 Attachment A, tab M&D-2.

<sup>&</sup>lt;sup>73</sup> In the Matter of Portland Gen. Elec. Co., UE 187, 2009 WL 214804, at \*16 (May 19, 2009).

<sup>&</sup>lt;sup>74</sup> Ex. Environmental Intervenors/310, EG DR 21 Attachment A, M&D-1.

development organizations" that typically are not granted recovery.<sup>75</sup> Avista has failed to carry its burden to demonstrate that such expenses can be allocated to ratepayers.

# C. STAFF EXPENSES AND SALARIES RELATED TO POLITICAL ACTIVITIES

Q. What other costs related to public affairs and political expenses does Avista seek to recover from ratepayers?

A. As described above, the AGA and NWGA engage in extensive partisan and political activities. Besides paying association dues, Avista incurs considerable expenses related to association activities and events.

Avista staff regularly attend association conferences, expensing registration fees, meals, transportation, and lodging to the company. Expenses directly attributed to, or proportionally allocated to, Oregon that are described as meals, transport, and other association costs total \$14,753 for AGA, \$1,414 for NWGA, and \$2,889 for EEI. An additional \$2,108 went toward joint EEI/AGA events, and \$494 was spent for an unattributed gas conference.<sup>76</sup> Avista has not clearly indicated whether it quarantines those costs from costs sought to be recovered from ratepayers.

**Q.** Has Avista expended any staff time on political activities?

A. Attending a conference uses staff time and incurs connected staff expenses. Participation
 by staff in conferences organized by these entities should be treated as political
 expenditures. Additionally, Avista has an executive-level position dedicated solely to
 "regulatory and governmental affairs." This employee, and almost certainly others,

<sup>75</sup> See In the Matter of Portland Gen. Elec. Co., 2009 WL at \*16.

<sup>&</sup>lt;sup>76</sup> Ex. Environmental Intervenors/321, Staff DR 57, Attachment A Excerpt, Other Association Expenses (containing highlighted and sorted expenses).

spends time on political activities. That Avista employees spend time on political issues is evident when considering that Avista engages in direct lobbying, including signing onto a joint letter to Washington representatives to oppose a package of clean energy legislation in the 2022 session.<sup>77</sup>

# Q. Can you explain why staff involvement in public relations and political affairs should not be recoverable from ratepayers?

A. Avista has not demonstrated that it has made efforts to quantify employee costs that should be booked to shareholders because of the nature of the related activities rather than to ratepayers. Staff involvement in such activities constitutes political activity on behalf of the company. FERC regulations require that such political activities to be billed to shareholders.<sup>78</sup> Oregon policy is the same, with this Commission explaining that ratepayers should not be required to contribute to the advancement of political positions in which they may not believe.<sup>79</sup> Expenditures that constitute political activities – whether in the form of staff salaries, expenses, or association dues – should not be charged to ratepayers.

As detailed extensively above, AGA and NWGA engage in a significant proportion of political and promotional activity that would not be directly recoverable by a utility and therefore should not be recoverable indirectly through engagement with third party associations.

OPENING TESTIMONY OF GREER RYAN UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

<sup>&</sup>lt;sup>77</sup> Ex. Environmental Intervenors/322.

<sup>&</sup>lt;sup>78</sup> 18 CFR § 367.4264.

<sup>&</sup>lt;sup>79</sup> Re Pac. Nw. Bell Tel. Co., Am. Network, Inc., et al., UT 43, Order No. 87–406, 82 P.U.R. 4th 293, 320 (Mar. 31, 1987) (emphasis added).

# Q. How much should be deducted from expenses related to industry associations to reflect non-recoverable costs?

A. For the same reasons they should not be able to recover industry association dues, Avista should not be able to recover expenses related to industry association activities, such as conference expenses, from ratepayers.

#### **Q.** What about staff time and salary expenses?

A. Regarding staff expenses and salaries, Avista should be required to report and quantify the proportion of time spent by its regulatory and government affairs personnel on political and promotional activities. This amount should then be deducted from the amount charged to ratepayers. Having failed to do so, Avista should not be able to allocate any of these expenses to ratepayers.

16 17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

<sup>80</sup> Energy and Policy Institute, *Paying for Utility Politics* (May 2016), at 4-7; *see also* D.14-08-032, *Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 204-2016*, at 261-62 (Cal. P.U.C, Aug 20, 2014), <a href="https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M102/K361/102361873.PDF">https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M102/K361/102361873.PDF</a> (disallowing larger percentage of EEI dues); In the Matter of Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, No. 2020-00350 at 27-30 (Ky. Pub. Serv. Comm'n., June 30, 2021), <a href="https://psc.ky.gov/pscscf/2020%20Cases/2020-00350//20210630\_PSC\_ORDER.pdf">https://psc.ky.gov/pscscf/2020%20Cases/2020-00350//20210630\_PSC\_ORDER.pdf</a>.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

#### III. <u>AVISTA IS IMPROPERLY CHARGING RATEPAYERS FOR PROMOTIONAL</u> <u>AND INSTITUTIONAL ADVERTISING EXPENSES</u>

#### A. ADVERTISING AND RELATED EMPLOYEE COSTS

#### Q. What is promotional and institutional advertising?

A. I am not a lawyer, and I provide the below references to state and federal law to the
 Commission for context only. Advertising expenses are "expenses for communications which inform, influence, and/or educate customers."<sup>81</sup>

"Promotional Advertising" means advertising that has a primary purpose of communicating an energy utility's promotional activities or promotional concessions.<sup>82</sup> Such activities are intended to promote use of the energy service.<sup>83</sup>

Institutional advertising "means advertising expenses, the primary purpose of which is not to convey information, but to enhance the credibility, reputation, character, or image of an entity or institution[.]"<sup>84</sup>

### **Q.** Can a utility recover promotional advertising from ratepayers?

A. To achieve the Commission's purpose of protecting customers and ensuring fair and reasonable rates,<sup>85</sup> Oregon's regulations allow recovery of informational and conservation-related advertising but generally prohibit recovery of institutional and promotional advertising unless the utility demonstrates it is fair and reasonable. Oregon's administrative rules classify promotional and institutional advertising as "Category C"

- <sup>84</sup> OAR 860-026-0022(1)(c).
- <sup>85</sup> ORS 756.040(1).

OPENING TESTIMONY OF GREER RYAN UG 461 Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

<sup>&</sup>lt;sup>81</sup> OAR 860-026-0022(1).

<sup>82</sup> OAR 860-026-0022(1)(f).

<sup>&</sup>lt;sup>83</sup> OAR 860-026-0010.

advertising. Utilities carry the burden of demonstrating that Category C advertising is just and reasonable to include in rate making.<sup>86</sup>

Federal law generally prohibits recovery of promotional advertising from ratepayers as well.<sup>87</sup>

5

1

2

3

4

6

7

8

9

10

11

12

#### Q. Are any advertising costs presumed reasonable?

A. Oregon's administrative rules presume that portions of Category A and all Category B advertising expenses are reasonable.<sup>88</sup> Category A advertising expenses include energy efficiency or conservation, utility service advertising, and utility information advertising expenses.<sup>89</sup> Category B advertising expenses are those legally mandated by legislative, regulatory, or judicial entities.<sup>90</sup> The presumptions of reasonableness are rebuttable.<sup>91</sup>

# Q. Please describe the types of advertising that Avista seeks recovery for in this rate case.

A. Avista seeks to recover \$70,293 for Category A advertising and \$153,607 for Category B
 advertising. Avista states that it is not seeking to recover Category C or D expenses.<sup>92</sup>

# Q. What concerns do you have about some of these advertising costs being charged to ratepayers?

<sup>&</sup>lt;sup>86</sup> OAR 860-026-0022(3)(c).

<sup>&</sup>lt;sup>87</sup> 15 U.S.C. § 3203(b)(2).

<sup>&</sup>lt;sup>88</sup> OAR 860-026-0022(3).

<sup>&</sup>lt;sup>89</sup> OAR 860-026-0022(2)(a).

<sup>&</sup>lt;sup>90</sup> OAR 860-026-0022(2)(b).

<sup>&</sup>lt;sup>91</sup> OAR 860-026-0022(4).

<sup>&</sup>lt;sup>92</sup> Exs. Environmental Intervenors/323 and 324, Staff DR 104.

#### A. There are several advertisements classified as Category A that instead constitute

promotional advertising or institutional advertising.

First, in its October 2022 issue of "Connections," Avista promoted a natural gas

appliance, stating:

A natural gas fireplace can add warmth and character to any room while helping save on heating bills. As a customer of Avista you could save up to \$250 on a natural gas fireplace with incentives from Energy Trust of Oregon.

The ad indicated that customers could find out more about obtaining this appliance online or by phone through the Energy Trust.<sup>93</sup> Avista has included this as an example of a Category A advertisement, for which related costs are charged to ratepayers. However, this advertisement does not fall within Category A advertising, as it neither promotes energy efficiency nor provides utility service information. Instead, it promotes the purchase and use of a gas appliance and constitutes promotional advertising that should not be charged to ratepayers.

Second, Avista has issued an advertisement with the text: "Proud to support the Southern Oregon Land Conservancy."<sup>94</sup> Such an advertisement does not provide utility or safety information to customers. Instead, its intended effect is to improve the utility's public image and is therefore institutional advertising that should be classified as Category C advertising.

Third, Avista uses its Category A advertising to promote natural gas as clean, sustainable, and beneficial to customers. In its June 2022 issue of "Connections," Avista

<sup>93</sup> Ex. Environmental Intervenors/325, EG DR 84 Attachment A #1.

<sup>94</sup> Ex. Environmental Intervenors/326, EG DR 84 Attachment A – Community Ad 0412.

proclaimed its "aspirational goals" to reduce carbon emissions and its approach to invest in "renewable natural gas, hydrogen, and other renewable biofuels." It touted a new option for Washington and Oregon customers to participate in the renewable natural gas program.<sup>95</sup> In its September 2022 issue of Connections, on text superimposed over a gas cooking range, the utility declared that:

Avista is committed to clean energy and creating a sustainable and vibrant future for all of us. Natural gas continues to be a responsible, practical and effective part of reducing emissions and achieving decarbonization. We can't have reliable energy today without it.<sup>96</sup>

While statements about the renewable natural gas program might be considered informative, their intended purpose is in fact to improve the utility's image. This becomes clear when reading customer participant survey responses to the RNG pilot program, stating "I don't know anything about the program. Am I participating in this program? You need to educate me on this, both what you are attempting to accomplish, and the associated costs!" or "Thought that I was getting credit toward use of therms I used."<sup>97</sup> The customers surveyed indicate support for reducing emissions and addressing climate change, but not necessarily how this program plays in role in those aspirations.

Avista's advertisements related to natural gas as a "clean" fuel, or RNG's role in a sustainable future, are at best, institutional advertising intended to improve the utility's image. At worst, they are misleading advertisements about the role of natural gas in our climate crisis. Costs associated with these advertisements should not be recoverable from ratepayers and these advertising efforts should instead be classified under Category C.

<sup>95</sup> Ex. Environmental Intervenors/328, EG DR 84 Attachment A #3.

OPENING TESTIMONY OF GREER RYAN UG 461 Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

<sup>&</sup>lt;sup>96</sup> Ex. Environmental Intervenors/327, EG DR 84 Attachment A #2.

<sup>&</sup>lt;sup>97</sup> Ex. Environmental Intervenors/308, EG DR 2 Attachment D.

1

2

3

4

5

6

7

8

10

11

#### Q. What other costs might a utility expend related to advertising?

A. A utility's employees are central to the efforts to strategize, create, and disseminate advertising. The associated costs, such as employee salaries and expenses, also fall under "advertising" and should be scrutinized to the same extent. However, utilities typically do not break down the time or expenses devoted by employees to the different classes of advertising. This can be a concern because it may lead to what would have been presumed as non-allowable expenses, or a larger percentage of allowable expenses, actually being charged to ratepayers than initially disclosed.

9 Q. What employee expenses did Avista incur related to advertising?

A. Avista stated that labor and other expenses related to sales and marketing activities included in the test year was approximately \$105,000."98 In Avista's detailed breakdown, some of those expenses include meals and transportation related to EEI and 12 NWGA conferences and to Chamber of Commerce meetings. 13

#### 14 Q. Please detail which advertisements, and associated costs, should not be recoverable 15 from ratepayers and explain your reasoning.

16 A. Based on information received from Avista so far, it is not evident what proportion of 17 advertising costs charged to ratepayers are associated with the three types of 18 advertisements, discussed above, that should properly be reclassified as Category C 19 advertising. Nor is it evident what proportion of staff salaries and expenses go toward 20 institutional and promotional advertising. Furthermore, some expenses are connected to 21 third parties, such as EEI, that engage in political and promotional activity that may not 22 be recoverable from ratepayers.

<sup>98</sup> Exs. Environmental Intervenors/329 and 330, Staff DR 173.

I therefore recommend that the Commission disallow recovery of advertising staff time and expenses, as well as Category A advertising expenses, until Avista demonstrates what percentage of associated costs are appropriately classified under Category A or Category C advertising.

#### IV. <u>CONCLUSION</u>

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Q. What are your recommendations to the Commission?

A. I recommend that Avista be prohibited from recovering costs associated with CPP litigation. Avista should not be permitted to recover AGA and NWGA association dues from ratepayers. Expenses related to association activities should similarly be disallowed. These various expenses which are political in nature should be re-allocated to an account that is presumptively unrecoverable, such as FERC Account 426.4.

Specific forms of advertising classified as Category A but which are promotional or institutional in nature should be recategorized to Category C as institutional or promotional advertising. The associated costs should not be recoverable from ratepayers. Avista should additionally not be allowed to recover advertising staff time and expenses, unless they detail the proportion of staff time and other expenses associated with promotional and institutional advertising, to ensure customers are not charged for such costs.

19

#### Q. Does this conclude your direct testimony?

20 A.

Yes.

OPENING TESTIMONY OF GREER RYAN UG 461

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

## WITNESS QUALIFICATION STATEMENT

NAME:	Greer Ryan
EMPLOYER:	Climate Solutions
TITLE:	Clean Buildings Policy Manager
ADDRESS:	1300 SE Stark St. #207 Portland, OR 97214
EDUCATION:	Masters of Science, Environmental Science Indiana University, Bloomington, IN
	Bachelor of Science, Molecular Environmental Biology University of California Berkeley, Berkeley, CA
EXPERIENCE:	Advocate for clean energy, efficiency, and affordability policies and regulations in Oregon, at the state and local levels. Research environmental, climate, and energy justice policy and regulatory tools. Support community-based and environmental justice organizations' engagement in PUC dockets and other state-level policy venues. Participate in technical, rulemaking advisory, and related working groups to implement state climate policies.
	At the Oregon PUC, engaged in a variety of proceedings including the "Natural Gas Fact-finding Investigation" proceeding (UM 2178), NW Natural IRP (LC 79), NW Natural Rate Case (UG 435), and various energy affordability dockets. Engaged in NW Natural's Integrated Resource Planning working groups.
	Between 2015 and 2021, worked for the Center for Biological Diversity as a Senior Energy Policy Analyst on a variety of clean energy, climate, energy affordability, and rate-related issues, including inappropriate recovery of political influence spending by utilities and utility industry associations. Provided testimony before the North Carolina Utilities Commission on behalf of the Center for Biological Diversity and Appalachian Voices in Duke Energy Carolinas, LLC's Application for Adjustment of Rates and Charges Applicable to Electric Service in North Carolina (NCUC Docket 1214). Co-authored a Petition for Rulemaking to the Federal Energy Regulatory Commission to amend the Uniform System of Accounts' Treatment of Industry Association dues (FERC Docket RM21-15-000).

## **Greer Ryan**

Portland, OR | 97214

#### Experience

Climate Solutions	Portland, OR
Clean Buildings Policy Manager	July 2021– present
<b>Center for Biological Diversity</b>	Portland, OR
Senior Energy Policy Analyst, Energy Justice Program	April 2015 – July 2021
School of Public and Environmental Affairs at Indiana University	Bloomington, IN
Graduate Research Assistant, Meretsky and Attari Labs	2012 – 2014
Natural Resources Defense Council (NRDC)	Los Angeles, CA
Water Efficiency Graduate Intern	Jan 2012 – May 2012
Keas, Inc.	San Francisco, CA
Customer Success and Metrics Associate	2011 – 2012
Education	
Indiana University, School of Public and Environmental Affairs	Bloomington, IN
M.S. Environmental Science	2014

University of California at Berkeley, College of Natural Resources B.S. Molecular Environmental Biology

#### Select Publications

Ryan, G. (2021). "Power Crisis: Despite Transparency Failures, Utility Information Reveals Major Home Shutoff Problem," Report for Center for Biological Diversity.

Hernandez R.R., A. Armstrong, J. Burney, G. Ryan, K. Moore-O'Leary, I. Diedhiou, S.M. Grodsky, L. Saul-Gershenz, R. Davis, D. Mulvaney, G.A. Heath, S.B. Easter, B. Beatty, M.K. Allen, D.M. Kammen. (2019). Techno-ecological synergies of solar energy for global sustainability. Nature Sustainability. 2: 560-568.

Ryan, G., A. Hausman, V.J. Meretsky, W.E. Anderson. (2015). Wildlife management policy. Hubert Project. Humphrey School of Public Affairs at University of Minnesota. ECase 386.

#### Select Presentations

Ryan, G., N. Apter, M. Tidwell, N. Hughes. (May 2022). "State Policy Implementation: From Energy Generation to End Use," Panel at Environmental Law Education Center in Portland, OR.

Ryan, G., J. Su, H. Crystal, C. Hall. (March 2019). "Transforming our Energy System to Meet Climate and Energy Democracy Goals," Panel at the Public Interest Environmental Law Conference in Eugene, OR.

Ryan, G. (April 2017). "Energy, Sustainability, and Solar Policy Fights," Lecture given at UC Davis for "Energy and Environment" course in 2017, Davis, CA.

Berkeley, CA 2011

#### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED:	05/05/2023
CASE NO:	UG 461	WITNESS:	Kevin Holland
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Patrick Ehrbar
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	EG - 025	TELEPHONE:	(509) 495-8620
		EMAIL:	Patrick.ehrbar@avistacorp.com

#### **REQUEST:**

Please provide any spending on litigation challenging Oregon's clean energy statutes or regulations in the past five years, and any expected litigation expenditures going forward.

#### **RESPONSE:**

We have two firms we are using in connection with the CPP litigation. The following is the amounts we have spent to date:

		<b>Fees</b>	<u>Costs</u>	<u>Total</u>
•	Baker Botts (Lead Counsel):	\$40,262.00	\$515.91	\$40,771.91
٠	Snell & Wilmer (Local Counsel):	\$10,983.04	\$196.18	\$11,179.22

The Company cannot speculate on the level of future expenditures related to issues included in this request.

#### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED	: 2/24/2023
CASE NO.:	UG 461	WITNESS:	Kaylene Schultz
<b>REQUESTER:</b>	PUC Staff	<b>RESPONDER:</b>	Joel Anderson
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	Staff - 057	TELEPHONE:	(509) 495-2811
		EMAIL:	joel.anderson@avistacorp.com

#### **REQUEST:**

Please provide transaction summaries for Non-Labor costs recorded in all FERC Accounts for the Base Year. Please place in MS Excel and for each transaction include:

- a. Account number and Account Description
- b. FERC Account and Account Description
- c. Total amount charged, and as applicable, any subtotals assigned to Non-Utility/Total Company Allocation and/or OR-Allocation. Please note that this response must include costs on an Oregon - Allocated Jurisdictional Share;
- d. Cost element
- e. Cost element description
- f. Description of cost that clearly demonstrates the business purpose;
- g. Name of vendor (if applicable);
- h. Business Unit (Profit Center) being charged;
- i. Service provided (e.g., reports to stockholders, lease, etc.).

#### RESPONSE

Please see Staff\_DR\_057 Attachment A for transaction summaries for all FERC Operations and Maintenance and Administrative and General Accounts, 813000 - 935000. There are four tabs included in this workbook:

Tab 1 is labeled "Transaction Download" and includes transaction detail for FERC Accounts 813000 - 935000 included in Oregon's Base Year ending September 30, 2022.

Tab 2 is labeled "Staff\_DR\_057 Attachment A Summary," which includes two pivot tables summarizing the transaction detail from Tab 1 by: 1) FERC account and 2) expenditure type. Both pivot tables exclude labor and benefit related transactions.

Tab 3 is labeled "Staff\_DR\_057 Attachment A Detail" and includes a pivot table summarizing transaction detail included in Tab 1 by service and jurisdiction on a system basis.

Tab 4 is labeled "Staff\_DR\_057 Attachment A Exp Type" and provides a reference guide to labor and non-labor expenditure types for ease of filtering transactions in this response.

# Native Excel Spreadsheet

305 Staff\_DR\_057 Attachment A\_EXCERPTS \_ Baker Botts1.xlsx

The Company is including only those accounts that effect Oregon, because electric is not allocated to Oregon and is therefore not included in the case. \*excludes FERC accounts 925200, 925300, 926200, 926205, 926300, 926305, 926500, and 926505

			Labor/Non-Labor Flag For DR_057	Non-Labor	
Labor/Non-Labor Flag For D	DR_057 Non-Labor		FERC Account	(Multiple Items)	
Row Labels	Sum of Transaction Amount	Sum of Gas South Amount	Row Labels	Sum of Transaction Amount	Sum of Gas South Amount
813000	317,170	132,230	000 Direct GL	51,366,642	5,059,543
813010	179,751	54,659	005 Legal Services	2,391,451	135,794
824000	972,043	93,802	010 General Services	423,314	30,476
837000	2,158,667	208,311	012 Combo Goods & Services	74,300	7,578
870000	313,126	79,355	015 Construction Services	2,151,922	829,421
874000	4,033,809	1,580,694	020 Professional Services	9,611,384	969,552
875000	132,867	99,866	025 Temporary Labor	52,019	13,527
876000	1,367	280	030 Training - In House	-	
877000	13,044	1,172	035 Workforce - Contract	6,734,559	2,237,602
878000	1,019,976	319,576	050 Volume Rebates	(734)	(67)
879000	620,128	286,901	105 CIAC Consumer	(6,015)	)
880000	887,890	314,631	115 Misc Bills	(117,681)	(53,417)
881000	(40,315)	) (12,427)	116 Misc Bills - Damage Claims	482,533	47,679
885000	6,709	140	117 Misc Bills-Serv Diversion	(1,024)	) (394)
887000	1,065,250	656,910	205 Airfare	199,967	50,740
889000	282,119	154,306	210 Employee Auto Mileage	86,248	14,151
890000	35,560	24,967	215 Employee Business Meals	323,749	57,020
891000	107,372	11,382	220 Employee Car Rental	36,339	8,663
892000	1,329,953	333,492	225 Conference Fees	149,828	19,021
893000	1,477,271	465,916	230 Employee Lodging	316,280	80,520
894000	147,382	74,448	235 Employee Misc Expenses	363,934	36,727
902000	261,433	58,013	405 Inventory Returns	(181,083)	(18,060)
903000	5,994,641	868,783	415 Material Issues	1,119,933	287,043
904000	1,440,259	246,844	525 Small Tools loading	742,684	181,029
905000	25,996	3,535	530 Stores/Material Loading	225,442	46,438
908000	47,423	4,621	532 Materials Tax/Fght Loading	34,586	10,012
908250	1,683	1,683	550 Company Aircraft	767,728	120,357
908600	48,717,494	4,750,130	555 Misc Vehicles	207,425	26,042
908690	160,346	(2,458)	560 Road Vehicles	587,114	160,711
909000	1,240,514	265,246	565 Small Vehicles	992,328,639	90,539,259
910000	338,541	46,247	570 Work Vehicles	367,134	1,053
920000	5,415,401	486,275	590 Transportation Adjustment	(990,573,000)	(89,914,311)
921000	5,350,873	488,187	600 Local Service	498,687	45,622
923000	19,267,570	1,636,001	601 Dedicated Circuits	529,210	41,102
924000	3,115,072	241,684	602 Toll Free	170,466	23,190
925100	11,201,464	661,800	603 Pagers	3,589	327
926100	1,031,159	132,803	604 Printer Toner	121,220	11,065
928000	6,323,313	800,203	605 Directory Advertising	4,032	549
930100	204	59	607 UPS	903	82
930200	6,744,977	571,963	608 Cell/Smart Phone Service	330,274	30,184
931000	959,815	48,236	609 Long Distance	43,802	4,000
935000	18,033,095	1,476,732	611 Cable Service	40,410	3,688
Grand Total	150,732,411	17,667,198	612 Conference Calling	129	12
			613 Telephones	1,518	139

The Company is including only those accounts that effect Oregon, because electric is not allocated to Oregon and is therefore not included in the case. \*excludes FERC accounts 925200, 925300, 926200, 926205, 926300, 926305, 926500, and 926505

			Labor/Non-Labor Flag For DR_057	Non-Labor	
Labor/Non-Labor Flag For DR_057	7 Non-Labor		FERC Account	(Multiple Items)	
Row Labels	Sum of Transaction Amount	Sum of Gas South Amount	Row Labels	Sum of Transaction Amount	Sum of Gas South Amount
			614 Frame Relay	599,138	54,711
			615 Internet	203,285	18,564
			617 Hardware	1,922,541	144,919
			618 Software	10,467,459	847,368
			626 Hardware Purchases	623	58
			629 Wireless WAN	1,119,525	99,170
			632 Smart Phone Service	28,080	
			638 Telemetering	226,626	
			639 Mobile Radio	1,569	
			641 Microwave	0	
			644 Optical Network Equip	4,879	
			645 Telephony Equip	346	
			648 Protection & Isolatn Equip	-	-
			651 TWACS	3,436	
			653 Emergency Fiber Restore	26,152	
			654 Test Equip	41	
			655 Gas Telemeter	16,646	
			656 Shop Stock	989	
			660 Remote Disconect Paging	230	
			661 Hosting Services	6,904,608	625,495
			664 TV_Projector	1,469	133
			666 PC Peripherals	351	32
			667 Audio Visual Installations	38	3
			710 Rental Expense - Vehicle	125,093	31,209
			715 Vehicle - Other	4,834	548
			720 Vehicle Fuel Gasoline	5,672	1,763
			721 Vehicle Fuel Diesel	1,742	12
			725 Vehicle Parts & Supplies	1,989	132
			727 Vehcile Repair - External	80	80
			730 Vehicle Service - Internal	14	14
			731 Vehicle Service - External	2,685	
			735 Vehicle Tires	1,143	306
			805 Adjustments	29,900	4,071
			810 Advertising Expenses	501,023	159,853
			812 Bunkhouse Expenses	207	
			815 Computer Equip Hardware	11	1
			820 Computer Equip Software	46,895	4,590
			822 Customer Activities	3,000	410
			823 Customer billing refund	1,048	1,048
			824 Customer - Agency Payment	3,583	3,583
			825 Donations	1,805	34
			826 Sponsorships	17,092	
			830 Dues	1,225,418	65,666
			834 Inventory Adjustment	1,408	668
			835 Non Vehicle Equip Repair	2,194	202
			836 Equipment - Office Furn	7,483	472
			837 Equipment-Stores and Lab	71	
			838 Fees - General	153,988	10,240
			839 Fire Retardant Clothing	94,722	
			840 Freight Costs	4,437	2,690
			845 Insurance - Gen Liability	9,917,888	614,170
			850 Insurance - property	2,646,852	
			/		

The Company is including only those accounts that effect Oregon, because electric is not allocated to Oregon and is therefore not included in the case. \*excludes FERC accounts 925200, 925300, 926200, 926205, 926300, 926305, 926500, and 926505

-Labor Flag For	DR_057 Non-Labor	l	Labor/Non-Labor Flag For DR_057 FERC Account	Non-Labor (Multiple Items)	
els	Sum of Transaction Amount	Sum of Gas South Amount	Row Labels	Sum of Transaction Amount	Sum of Gas South Amount
			851 Janitorial Supplies	104,076	36,876
			852 Janitorial Services	633,743	84,349
			853 Joint Project Costs	3,770,800	302,114
			855 Land and Land Rights	423,101	38,175
			865 Lease Expense - Equipment	303	
			870 Lease Expense - Other	553,794	10,568
			875 License Fees	31,030	2,856
			880 Materials & Equipment	1,051,817	192,543
			882 Materials - Large Purchase	855	78
			884 Minor Damages & Repair	232,378	31,555
			885 Miscellaneous	12,455,905	1,307,781
			890 Office Supplies	112,072	21,073
			895 Pay Stations	53,580	3,649
			900 Penalty/Late Fees	131	131
			905 Permits	(13,071)	(6,573)
			910 Postage	2,070,928	282,928
			915 Printing	614,605	63,112
			920 Rental Expense - Equipment	1,682	205
			925 Rental Expense - Other	21,800	4,162
			928 Regulatory Fees	6,236,628	798,509
			929 Restaurant Inventory	(90)	(117)
			930 Right-of-Way Easements	157	2
			932 Security Services	430,020	43,686
			933 Small Tools	14,079	2,769
			934 Tools	11,024	1,884
			935 Subscriptions	2,872,581	262,067
			937 Taxes	5,444	1,427
			940 Telecommunication Equip	2,833	217
			945 Telecommunication Use	26,310	5,399
			950 Training	657,620	61,647
			955 Uniforms - Employees	15,855	1,967
			956 Write off - Less than \$3	260	35
			Grand Total	150,732,411	17,667,198

	Labor/Non-Labor
Expenditure Type	Flag For DR_057
000 Direct GL	Non-Labor
005 Legal Services	Non-Labor
010 General Services	Non-Labor
012 Combo Goods & Services	Non-Labor
015 Construction Services	Non-Labor
020 Professional Services	Non-Labor
025 Temporary Labor	Non-Labor
030 Training - In House	Non-Labor
035 Workforce - Contract	Non-Labor
050 Volume Rebates	Non-Labor
105 CIAC Consumer	Non-Labor
115 Misc Bills	Non-Labor
116 Misc Bills - Damage Claims	Non-Labor
117 Misc Bills-Serv Diversion	Non-Labor
119 Grant Fund Cost Sharing	Non-Labor
205 Airfare	Non-Labor
210 Employee Auto Mileage	Non-Labor
215 Employee Business Meals	Non-Labor
220 Employee Car Rental	Non-Labor
225 Conference Fees	Non-Labor
230 Employee Lodging	Non-Labor
235 Employee Misc Expenses	Non-Labor
305 Incentive/Bonus Pay	Labor
310 Non Benefit Labor - NU	Labor
315 Non Benefit Labor - Union	Labor
320 Overtime Pay - NU	Labor
325 Overtime Pay - Union	Labor
330 Paid Time Off - NU	Labor
335 Paid Time Off - Union	Labor
340 Regular Payroll - NU	Labor
345 Regular Payroll - Union	Labor
347 Regular Pay Adj - Union	Labor
352 Overtime Pay Adjustment	Labor
354 Regular Pay Adjustment	Labor
357 Paid Time Off-Union Adj	Labor
359 Incentive/Bonus Accrual	Labor
360 Incentive/Bonus Adjust	Labor
405 Inventory Returns	Non-Labor
415 Material Issues	Non-Labor
509 Pay Ben Inj & Dam	Labor
510 Payroll Benefits loading	Labor
511 Non-Service Loading	Labor
512 Incentive Loading-NU	Labor
514 Incentive Loading-Union	Labor
515 Payroll Tax loading	Labor
520 Payroll Time Off loading	Labor
525 Small Tools loading	Non-Labor
530 Stores/Material Loading	Non-Labor
532 Materials Tax/Fght Loading	Non-Labor
550 Company Aircraft	Non-Labor

555	Misc Vehicles	Non-Labor
560	Road Vehicles	Non-Labor
	Small Vehicles	Non-Labor
	Work Vehicles	Non-Labor
	Transportation Adjustment	Non-Labor
600	Local Service	Non-Labor
601	Dedicated Circuits	Non-Labor
602	Toll Free	Non-Labor
603	Pagers	Non-Labor
	Printer Toner	Non-Labor
		Non-Labor
	Directory Advertising	
	UPS	Non-Labor
	Cell/Smart Phone Service	Non-Labor
	Long Distance	Non-Labor
610	Fax Toner	Non-Labor
611	Cable Service	Non-Labor
612	Conference Calling	Non-Labor
	Telephones	Non-Labor
	Frame Relay	Non-Labor
	Internet	Non-Labor
	Hardware	Non-Labor
	Software	Non-Labor
	Adaptive Maintenance	Non-Labor
	Hardware Purchases	Non-Labor
629	Wireless WAN	Non-Labor
632	Smart Phone Service	Non-Labor
637	Data Circuit Maintenance	Non-Labor
638	Telemetering	Non-Labor
	Mobile Radio	Non-Labor
	Microwave	Non-Labor
	Optical Network Equip	Non-Labor
	Telephony Equip	Non-Labor
	Protection & Isolatn Equip	Non-Labor
	Network Maintenance	Non-Labor
	TWACS	Non-Labor
	Emergency Fiber Restore	Non-Labor
654	Test Equip	Non-Labor
655	Gas Telemeter	Non-Labor
656	Shop Stock	Non-Labor
659	Fixed 2 Way Radio Equip	Non-Labor
	Remote Disconect Paging	Non-Labor
	Hosting Services	Non-Labor
	TV_Projector	Non-Labor
	-	
	PC Peripherals	Non-Labor
	Audio Visual Installations	Non-Labor
	Data Cabling	Non-Labor
	Rental Expense - Vehicle	Non-Labor
	Vehicle - Other	Non-Labor
720	Vehicle Fuel Gasoline	Non-Labor
721	Vehicle Fuel Diesel	Non-Labor
725	Vehicle Parts & Supplies	Non-Labor
	Vehcile Repair - External	Non-Labor

730 Vehicle Service - Internal Non-Labor 731 Vehicle Service - External Non-Labor 735 Vehicle Tires Non-Labor 805 Adjustments Non-Labor 810 Advertising Expenses Non-Labor 812 Bunkhouse Expenses Non-Labor 815 Computer Equip Hardware Non-Labor 820 Computer Equip Software Non-Labor 822 Customer Activities Non-Labor 823 Customer billing refund Non-Labor 824 Customer - Agency Payment Non-Labor 825 Donations Non-Labor 826 Sponsorships Non-Labor 828 DSM Non-Labor 830 Dues Non-Labor 834 Inventory Adjustment Non-Labor 835 Non Vehicle Equip Repair Non-Labor 836 Equipment - Office Furn Non-Labor 837 Equipment-Stores and Lab Non-Labor 838 Fees - General Non-Labor 839 Fire Retardant Clothing Non-Labor 840 Freight Costs Non-Labor 845 Insurance - Gen Liability Non-Labor 850 Insurance - property Non-Labor 851 Janitorial Supplies Non-Labor 852 Janitorial Services Non-Labor 853 Joint Project Costs Non-Labor 855 Land and Land Rights Non-Labor 865 Lease Expense - Equipment Non-Labor 870 Lease Expense - Other Non-Labor 875 License Fees Non-Labor 880 Materials & Equipment Non-Labor 882 Materials - Large Purchase Non-Labor 884 Minor Damages & Repair Non-Labor 885 Miscellaneous Non-Labor 886 Miscellaneous Non Burden Non-Labor 890 Office Supplies Non-Labor 895 Pay Stations Non-Labor 900 Penalty/Late Fees Non-Labor 905 Permits Non-Labor 910 Postage Non-Labor 915 Printing Non-Labor 920 Rental Expense - Equipment Non-Labor 925 Rental Expense - Other Non-Labor 928 Regulatory Fees Non-Labor 929 Restaurant Inventory Non-Labor 930 Right-of-Way Easements Non-Labor 932 Security Services Non-Labor 933 Small Tools Non-Labor 934 Tools Non-Labor 935 Subscriptions Non-Labor 937 Taxes Non-Labor

940 Telecommunication Equip	Non-Labor
945 Telecommunication Use	Non-Labor
947 Testing-Rubber Gear	Non-Labor
950 Training	Non-Labor
955 Uniforms - Employees	Non-Labor
956 Write off - Less than \$3	Non-Labor

FERC Account	FERC Account Description	Vendor Name	Jurisdiction	Service	Sur.Jur
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	SNELL & WILMER LLP	OR	GD	GDOR
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	ED	EDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	ED	EDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA
923000	OUTSIDE SERVICES EMPLOYED	BAKER BOTTS LLP	WA	GD	GDWA

Organization Description	STATIND	Expenditure Org	Accounting Period	Project Description	Journal Name
P01 - Legal Expenses	DL	P01	202207	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202111	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202111	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202203	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202204	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202209	Outside Legal Services - GD/OR	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202204	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - ED/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202207	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - ED/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202207	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202204	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202204	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202206	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/WA	Purchase Invoices USD
P01 - Legal Expenses	DL	P01	202208	Outside Legal Services - GD/WA	Purchase Invoices USD

Transaction Description	penditure Cat	eg eport Categ	go:counting Y	Expenditure Type	Labor/Non-Labor Flag For DR_057	Source ID
DEQ LITIGATION GROUP	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
202200006	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
DEQ LITIGATION GROUP	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CLIMATE PROTECTION PLAN (CPP)	Contractor	OPER	2021	005 Legal Services	Non-Labor	AP
202200006	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
DEQ LITIGATION GROUP	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CLIMATE PROTECTION PLAN (CPP)	Contractor	OPER	2021	005 Legal Services	Non-Labor	AP
DEQ LITIGATION GROUP	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
DEQ LITIGATION GROUP	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
OREGON CPP/DEQ	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
202200008	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
OREGON CPP/DEQ	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
OREGON CPP/DEQ	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
OREGON CPP/DEQ	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
OREGON CPP/DEQ	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WA BUILDING CODE	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
CCA COMMENTS	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP
WASHINGTON BUILDING CODES	Contractor	OPER	2022	005 Legal Services	Non-Labor	AP

Transaction Amount	Electric Amount	Gas North Amount	Gas South Amount	Company
1,514.4			1,514.4	001
2,297.48			2,297.48	001
3,535.5			3,535.5	001
11,988			11,988	001
4,305.98			4,305.98	001
1,156.95			1,156.95	001
22,049.91			22,049.91	001
5,692.73			5,692.73	001
7,839.96			7,839.96	001
278.78			278.78	001
2,594.93			2,594.93	001
391.45			391.45	001
1,635.41			1,635.41	001
195.3			195.3	001
326.63			326.63	001
17,500		17,500		001
11,298.5	11,298.5			001
3,160.3		3,160.3		001
2,707		2,707		001
9,490.5		9,490.5		001
8,678.5	8,678.5			001
6,262		6,262		001
652.2		652.2		001
4,440		4,440		001
11,706.05		11,706.05		001
7,843.55		7,843.55		001
3,621.5		3,621.5		001
541.5		541.5		001

#### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG – 066

DATE PREPARED:06/02/2023WITNESS:Kaylene ScRESPONDER:Kaylene ScDEPT:NaturalRegulatoryTELEPHONE:EMAIL:kaylene.sch

Kaylene Schultz Kaylene Schultz Regulatory Affairs (509) 495-2482 kaylene.schultz@avistacorp.com

#### **REQUEST:**

Is Avista seeking recovery from ratepayers in this proceeding for costs charged to FERC Account 923, which are disclosed in Avista's response to Staff's Data Request No. 57?

#### **RESPONSE:**

Yes, Avista is seeking recovery of costs charged to FERC Account 923 – Outside Services Employed in UG 461. Staff\_DR\_057 is intended to represent non-labor related expenses included in the Base Year (12ME 09.2022). Oregon's share of expenses included in the Base Year (12ME 09.2022) for FERC Account 923 is approximately \$1.6 million. The total level of Oregon-related expense pro formed in this case is approximately \$1.8 million, after incorporating the effects of 1.01 – Allocation Factor Adjustment and 2.00 – Test Period Expense Adjustment.

#### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO:UG 461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 002

DATE PREPARED:05/16/2023WITNESS:Kevin ChristRESPONDER:Annie GamDEPT:Corp. ComTELEPHONE:(509) 495-2EMAIL:annie.gam

Kevin Christie Annie Gannon Corp. Communications (509) 495-2515 annie.gannon@avistacorp.com

#### **REQUEST:**

Please provide all documents relevant to Avista Utilities' advertising about renewable natural gas ("RNG"), including any internal reports, analysis, and messaging studies.

#### **RESPONSE:**

See attached:

- 1. EG\_DR\_002 Attachment A April 2022, Bill Message Turning waste into clean energy
- 2. EG\_DR\_002 Attachment B May 2022, Renewable natural gas e-blasts to all Oregon customers, series of two
- 3. EG\_DR\_002 Attachment C Webpage: <u>https://myavista.com/RNG</u>
- 4. EG\_DR\_002 Attachment D 2022 customer survey, RNG participants individual responses
- 5. EG\_DR\_002 Attachment E 2022 customer survey, RNG participants summary

A	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.							-	•				the Renewable Natural Gas Program?	And finally, why are you participating in the Renewable Natural Gas Program?
Low-cost energy source	Reliable energy source	and more evenly than	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Agree	Agree	Agree	Agree	Disagree	Disagree	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Agree		Reliability	Reliability	energy source	Comfort	Reliability	Low carbon energy source	Get a pulse on public thoughts.	Avista sends lots of great information I then send to clients its the least I can do to return the favor. Plus I have friends that worl at Avista!
Agree	Disagree	Totally agree	Agree	Disagree	Totally disagree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	A small step to reduce my impact on the massive climate chaos that is descending upon the earth.	Because while this program is not yet doing enough, it is much bette than doing nothing to address climate change.
Agree	Disagree	Disagree	Neither agree nor disagree	Totally disagree	Totally disagree	Agree	Neither agree	Disagree	Neither agree	Disagree	Totally disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	We already purchase renewable natural gas from Avista. We would prefer to use completely renewable energy (solar, wind, hydro, geothermal, etc) this is at least a better option for those of us trying to be very energy and carbon use conscious. we are pleased you are offering the option.	Ultimately we'd like to be
Agree	Agree	No opinion / Not applicable	Agree	No opinion / Not applicable	No opinion / Not applicable	Agree	Agree	No opinion / Not applicable	Agree	No opinion / Not applicable	No opinion / Not applicable		Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	I hope we're helping to increase the use of sustainable energy and that this will help with our fight against global warming.	Please see the answer above.
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	reducing carbon footprint	I do everything I can to reduce pollution, waste, climate change, global warming, drought and disasters even though miniscule and a little more costly it is a necessary effort, for my world, my country, humanity and posterity.
Neither agree nor disagree	Agree	Totally agree	-		Neither agree nor disagree	Neither agree nor disagree	-	Neither agree nor disagree	_	Agree	Neither agree nor disagree	-	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	Not sure yet.	not sure yet.
Agree	Agree	Totally agree	Totally agree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Totally agree	Neither agree nor disagree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	Supporting reliable alternatives to traditional organic fuels.	To find reliable alternatives to traditional organic fuels.
) Agree 0	Totally agree	Agree	Agree	Disagree	Agree	Agree	Totally agree			nor disagree	-	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Trying to create a more renewable power source - moving away from less renewable power sources.	Easy, fairly low cost way to try to move our personal energy use to more renewable, lower carbon power sources.
Neither agree nor disagree	Disagree	Agree	Neither agree nor disagree	Disagree	Disagree	Disagree		Neither agree nor disagree		Disagree	Neither agree nor disagree	Low price energy	Comfort	Low carbon energy source	Comfort	Reliability	Low carbon energy source		
Neither agree nor disagree	Agree	Totally agree	Agree	Totally disagree	Totally disagree	Neither agree nor disagree	Neither agree	Totally agree	Agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	The movement to lower carbon emissions into the atmosphere and slow down climate change.	Even though I think it's too late to d save much of the life on Earth, which I think is in collapse, I want t support a sustainable infrastructur as best I can in the time we have left.

A	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.												the Renewable Natural Gas Program?	And finally, why are you n participating in the Renewable Natural Gas Program?
Low-cost energy source	Reliable energy source	and more	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Agree	Totally agree	No opinion / Not applicable	Totally agree	Neither agree nor disagree	-	Totally disagree	Totally agree	-	Neither agree nor disagree		Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	Hoping a few dollars toward the program shows an investment and interest on behalf to keep going and develop the system. However, I did the math and if I went all in 100% renewable natural gas, it would cost me \$800 a month - so keep working on making it better. )	be a better option than other energy sources.
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Comfort	Low price energy	Comfort	Reliability	Comfort	By helping to lower our carbon footprint	Because we feel we can help make a difference
Agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Totally agree	Totally agree	Neither agree nor disagree	Agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source		
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	Better resource management	For the next generations
b Disagree	Agree	Totally agree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	my voice	to help power companies choose good low-carbon emitting and plentiful, reliable alternatives to what we have now
Agree	-	Neither agree nor disagree	-	Totally disagree	Totally disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	I hope that I am helping support a transition to a purely renewable natural gas program	same as above
o Agree	Totally agree	Agree	Agree	Agree	Agree	Totally agree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Reliability of system	Environmentally sound
No opinion / Not applicable	Neither agree nor disagree		No opinion / Not applicable	Disagree	Disagree	No opinion / Not applicable	Totally agree	No opinion / Not applicable	No opinion / Not applicable	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source		Reducing carbon footprint	To reduce carbon footprint
Neither agree nor disagree	Agree	Agree	Agree	Disagree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source		
Neither agree nor disagree	Neither agree nor disagree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Neither agree nor disagree	Agree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	The exploration and development of renewable energy sources, especially those that can remove what would otherwise be waste.	To encourage creative development in reuse and repurposing of materials, saving the mining of finite energy for its most efficient uses.
No opinion / Not applicable	No opinion / Not applicable	Agree	No opinion / Not applicable		No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	Neither agree nor disagree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source		Showing support for something we should consider expanding	Lower our household carbon output
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Neither agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Low price	Reliability	Low carbon	Comfort	Reliability	Comfort		

A	В	С	D	E	F	G	Н	1	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.												the Renewable Natural Gas Program?	And finally, why are you participating in the Renewable Natural Gas Program?
Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	and more	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Reliability	Reliability	Low price energy	Comfort	Reliability	Low carbon energy source	Putting my money into building a base for a renewable source of fue that is needed and used.	l sure hope so. I
Agree	Agree	Agree	Agree	Neither agree nor disagree	Disagree	Neither agree nor disagree	Agree	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Reliability	Comfort	Low carbon energy source	Comfort	Reliability	Comfort	I really don't know! Is this something I signed up for?	I don't know anything about the program. Am I participating in thi program? You need to educate m on this, both what you are attempting to accomplish, and the associated costs!
Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	-	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	helping toward a green energy furure	my grandchildren's future depend on it
Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Totally disagree	Neither agree nor disagree	Totally agree	Totally agree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	I'm attempting to be earth friendly.	I'm participating because I believe it's the right thing to do
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Disagree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	helping get a better option moving forward	supporting a more environmental choice that is cost effective
Agree	Disagree	No opinion / Not applicable	No opinion / Not applicable	Totally disagree	Totally disagree	Disagree	Totally agree	No opinion / Not applicable	No opinion / Not applicable	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source		
Totally disagree	Disagree	Agree	Agree	No opinion / Not applicable	No opinion / Not applicable	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Future forward thinking to reduce our impact on this planet.	It's the ABSOLUTELY correct thing do.
Neither agree nor disagree	Agree	Totally agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Low price energy	Reliability	Low price energy	Comfort	Reliability	Low carbon energy source	Not allowing Methane to be wasted in the atmosphere	Put it to good use.
Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	A step toward addressing the climate crisis.	A step toward decreasing our carbon footprint.
Agree	Totally agree	Agree	Agree	Disagree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Comfort	Helping a technology in the early phases of adoption.	Lower our carbon footprint and increase demand for a fledgling technology.
Agree	Agree	Agree	Agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Comfort	Low carbon energy source	Low price energy	Low carbon energy source	Comfort	The future of our existence	To do my part in helping the earth and the people in it.
Agree	Totally agree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Totally agree	Agree	Agree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	the future of our planet	same as above
Agree	Totally agree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Disagree	Reliability	Comfort	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Helping to slow global warming	An easy way to do something to help global warming
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Low price energy	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Comfort	Cleaner environment. Less waste of resources.	For the reasons above and also for keeping energy costs down.

А	В	С	D	E	F	G	Н	1	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each rov	e					In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each					ь. 							What do you believe you're contributing to by participating ir the Renewable Natural Gas Program?	And finally, why are you participating in the Renewable Natural Gas Program?
Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	row. Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
2 Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	No opinion / Not applicable	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Protecting the environment from high carbon emissions.	It's the right thing to do.
39 Totally agree 40	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	I am using an energy source that contributes to a reduction in globa warming.	It is more environmentally friendly.
Disagree 41	Disagree	Totally agree	Agree	Totally disagree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Agree	Neither agree nor disagree	Agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Comfort	I'm contributing to development or renewable gas resources and infrastructure	Unless we start investing a clean energy future, we'll never get there
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	I want to leave a smaller footprint on the earth. Humans are destroying the planet	To learn what I can do to leave a smaller footprint
Agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Reliability	Comfort	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	One small droplet toward reducing global warming.	Save the planet.
Agree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Agree	Agree	Agree	Totally agree	Totally agree	Agree	Agree	Reliability	Comfort	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Hopefully lowering my carbon footprint and helping the planet.	Climate change requires all of us to do our part to save the planet.
Totally agree	Totally agree	Neither agree nor disagree	• Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Disagree	Neither agree nor disagree	Totally agree	Totally agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source		I don't know. NatGas is the best low carbon fuel on the planet already. I guess I feel I'm funding to help create better methods of making NatGas the best it can be.
Neither agree nor disagree	Agree	Neither agree nor disagree	e Agree	Neither agree nor disagree	Neither agree	Agree	Neither agree nor disagree	Agree	Agree	Totally agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	reducing our impact on the environment through use of more natural/ renewable resources	To support the use / development of renewable natural gas, and thereby reducing my carbon footprint on our planet.
Agree	Agree	Agree	Agree		Neither agree	Disagree	Disagree		Neither agree nor disagree	Agree	Disagree	Reliability	Reliability	Low price energy	Comfort	Reliability	Comfort	Avista's clean energy goals.	To help.
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Comfort		Low price energy	Low carbon energy source		Keep updated on new products	Keep informed on renewable program
48 Neither agree nor disagree	Neither agree		Agree		Neither agree	Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Reliability	Reliability		Low price energy	Low carbon energy source	Low carbon energy source		
49 Totally agree	Agree	Totally agree	Totally agree	Totally agree	Agree	Agree	Neither agree nor disagree	Totally agree	Totally agree	Totally agree		Low price energy	Comfort	Low carbon energy source	Comfort	Reliability	Comfort	saving the planet	doing my part
Totally disagree	Totally agree	Totally agree	Totally agree	Totally disagree	Totally agree	Agree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability		Low price energy	Low carbon energy source		alternative to fossil fuel and moving us forward on making changes to abate climate change	same
Neither agree nor disagree	Totally agree	Totally agree	Totally agree		Neither agree nor disagree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Comfort	Low carbon energy source	Comfort	Reliability	Comfort	Funding research/ implementation of a new energy source	Climate change

A	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.												What do you believe you're contributing to by participating ir the Renewable Natural Gas Program?	Natural Gas Program?
		and more evenly than	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Agree 3	Totally agree	Totally agree	Totally agree	Agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Agree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	I don't know. The survey is confusing, especially the part about ranking the values. I could find no way to rank the values.	l want to help our planet survive with lower carbon fuels.
	Totally disagree	-	Neither agree nor disagree		Totally disagree	Neither agree nor disagree	Disagree	Agree	Totally agree	Totally disagree	No opinion / Not applicable	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	To help us seriously move away from all fossil fuels and change to sustainable energy resources. This also includes the elimination of BIOMASS burning wood which contributes to bad air quality and is by no way sustainable - especially when they cut down forests for fuel.	Same answer as above.
	Neither agree nor disagree	Agree	Agree	Disagree	Neither agree nor disagree	Agree	Totally agree	Agree	Agree	Totally agree	Totally agree	Low price energy	Comfort	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Getting rid of fossil fuels	We need to reduce our carbon footprint
Neither agree nor disagree	Agree	Agree	-	Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Not sure as only recently joined.	Thought that I was getting credit toward use of therms I used.
-	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low price energy	Low price energy	Reliability	Low carbon energy source		it to produce CO2 which is the byproduct of burning it. Capturing the Methane and redirecting for us in our homes is by far the most efficient use of the Methane, thereby reducing the amount of released CO2. It's a better balance to increase plant life to increase th CO2 to Oxygen exchange through photosynthesis. 3rd Grade Science
Agree	Agree	Agree	Neither agree nor disagree	Disagree	Disagree	Neither agree nor disagree	Neither agree nor disagree		Neither agree nor disagree	Agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source		Hoping to reduce the need for fracking and carbon based fuels in general	I want to do what I can to remain comfortable but reduce my carbon footprint and reduce fossil fuel usage
		No opinion / Not applicable	Agree	Disagree	Agree	Agree	Agree	No opinion / Not applicable	Agree	Totally agree	Neither agree nor disagree	Reliability	Reliability		Low price energy	Reliability	Comfort	The survival of the earth by using a lower carbon resource.	
9 Neither agree nor disagree	Agree	Totally agree	Totally agree		Neither agree	Neither agree nor disagree	Agree	Totally agree	Totally agree	Neither agree nor disagree	Neither agree nor disagree	Reliability	Comfort	Low carbon energy source	Low price energy	Reliability	Comfort	Helping leave the planet a little better for our children and grandchildren	To contribute a better planet.
Agree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	Reducing carbon print.	Because I care about our environment.

A	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.												What do you believe you're contributing to by participating in the Renewable Natural Gas Program?	Natural Gas Program?
Low-cost energy source	Reliable energy source	and more	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Disagree	Totally agree	Agree	Agree	Totally disagree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Reliability	Comfort	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	reducing carbon footprint	it is the right thing to do
Z Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Positive environmental impact.	To help fight climate change.
Totally agree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Disagree	Totally agree	Agree	Agree	Agree	Totally agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Comfort	Reducing our dependence on fossil fuels.	To reduce our carbon footprint.
A Neither agree nor disagree	Agree	Agree	Agree	Neither agree nor disagree	-	Neither agree nor disagree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	Less dependency upon non renewable energy.	Less dependency upon non renewable energy sources.
Disagree	Agree	-	Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Agree	Neither agree nor disagree	-	-	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	not really sure	seems like a good thing
Agree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree		Neither agree nor disagree		Neither agree nor disagree		Agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	Be offsetting our personal natural gas use with renewable gas, we are contributing, on a very small scale, to the reduction in carbon released into air.	
Agree	Agree	Agree	Agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	Doing something to help our world!	to help our earth!
o Disagree 9	Agree	Neither agree nor disagree	Agree	Disagree	Disagree	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	Neither agree nor disagree	Agree	Agree	Reliability	Comfort	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	A more earth friendly source of heat and air conditioning	I volunteered but did not know I was already a "participant". When will renewable natural gas be distributed?
Totally agree	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	Agree	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	Low price energy	Reliability	Low carbon energy source	Low price energy	Reliability	Low carbon energy source	I would like to reduce pollution and am ready to pay A LITTLE more for clean environment. However your survey is really not very clear about the issues.	It is very important to me that we provide our people clean air, water and energy.
Totally agree	Totally disagree	Totally disagree	Neither agree nor disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Totally disagree	Neither agree nor disagree		Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Increasing the resources available to end reliance on fossil fuels	To help end reliance on fossil fuels
1 Agree	Agree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree		No opinion / Not applicable	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	I'm contributing to reduction and overall low carbon emissions of the region's energy system	I support sustainability goals and efficient use of resources including minimizing landfill waste
2 Totally agree	Totally agree	Totally agree	Totally agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source	Reduction of impact on climate change.	Reduction of impact on climate change.
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low price energy	Comfort	Reliability	Comfort	good use of my yard waste to help create the new gas	that's what is coming, we need it. Keep up the good work.
4 Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Reliability	Reliability		Low price energy	Low carbon energy source	Low carbon energy source	I hope the little I do by using Renewable sources helps our environment.	I try to help our climate change problem even a little bit.

A	В	С	D	E	F	G	Н		J	К	L	М	N	0	Р	Q	R	S	
ow strongly do you agree with each of these alue statements associated with Natural as?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.											•	What do you believe you're contributing to by participating in the Renewable Natural Gas Program?	Natural Gas Program?
ow-cost energy source	Reliable energy source	and more evenly than	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
gree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Reliability	Reliability	Low price energy	Low price energy	Reliability	Low carbon energy source	Environment	Trying to do a little to help where can
sagree	Disagree	Neither agree nor disagree	-	Totally disagree	Totally disagree	Neither agree nor disagree	Agree		Neither agree nor disagree		Neither agree nor disagree	Reliability	Reliability		Low price energy	Low carbon energy source	Low carbon energy source	Funding an experiment in rng?	Renewable is long term more reliable than traditional extractio
either agree nor disagree	Agree	Totally agree	Agree	Disagree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Disagree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Contributing to an intermediate energy source that will give us time to develop '0' carbon sustainable energy.	Because it seems like the most practical option at this time to supplement the curret electric network until a sustainable '0' carbon network can be establishe
gree	Agree	Agree	Agree	-	Neither agree nor disagree	e Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	encouraging alternatives to fossil fuels	to do my small part in limiting glo warming
either agree nor disagree	Agree	Totally agree	Totally agree		Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Totally agree	Totally agree	Totally agree	Agree	Reliability	Comfort	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	I like cooking with gas so I feel less guilty by using Renewable Natural Gas	
gree	Agree	Agree	Agree		Neither agree	Neither agree nor disagree	Neither agree nor disagree		Neither agree nor disagree	Agree	Neither agree nor disagree	Reliability	Comfort	Low carbon energy source	Comfort	Reliability	Comfort	comfort billing	because it is important
either agree nor disagree	-	e Neither agree nor disagree	-	Totally disagree	Disagree	Neither agree nor disagree		Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	I believe that I'm contributing to Avista's development of renewable natural gas as a viable replacement for natural gas.	I want to encourage Avista to sto emitting greenhouse gases.
gree	Totally agree	Totally agree	Totally agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Reliability	Comfort	Low price energy	Comfort	Reliability	Low carbon energy source	I believe in leaving a smaller carbon foot print but in a responsible manner Not jeaprodizing health and safety by precipitous moves.	l want to be a responsible consumer.
gree	Disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree		Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree		Reliability		Low price energy	Reliability	Comfort	Concern about cost and availability.	No
gree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Agree	Agree	Neither agree nor disagree	Agree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source		I have already gone solar in orde reduce my carbon footprint. I am trying to further reduce that footprint by adding renewable natural gas to my usage
otally agree	Totally agree	Totally agree	Totally agree	Agree	Totally agree	Neither agree nor disagree	Agree	Totally agree	Totally agree	Totally agree	Agree	Reliability	Comfort	Low price energy	Comfort	Reliability	Comfort	I believe that even a small offset by many can make a huge difference and contribute to lower emissions.	Because it is the right thing to do
tally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Low price energy	Comfort		Low price energy	Low carbon energy source	Low carbon energy source	Nothing. I am renting a total electric home.	I think it is important to keep ourvendors informed about wha we think.
gree	Neither agree	Neither agree	Agree	Disagree	Totally	Neither agree nor disagree	Agree	Agree	Agree	Neither agree	No opinion /								

#### EG\_DR\_002 Attachment D - RNG 2022 Individual Responses

А	В	С	D	E	F	G	Н	1	J	К	L	М	Ν	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.												What do you believe you're contributing to by participating ir the Renewable Natural Gas Program?	Natural Gas Program?
Low-cost energy source	Reliable energy source	and more	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	heating /	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Agree	Totally agree	Neither agree nor disagree	Agree	Agree	Disagree	Disagree	Totally agree	Neither agree nor disagree	• Totally agree	Totally agree	Disagree	Low price energy	Comfort	Low carbon energy source	Comfort	Reliability	Comfort	Environmental benefits	
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree		Neither agree	e Neither agree nor disagree	-	Totally agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Comfort	Hopefully research into energy capture from our many waste products; it will take investment and time to find as reliable a resource as natural gas but it hopefully will be worth it in the long run.	To make a small contribution to the research required to find clean, reliable energy and reduce our waste.
Neither agree nor disagree	Agree	-	Neither agree nor disagree	Disagree	Disagree	Agree	Totally agree	-	Neither agree nor disagree	Totally agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Helping to capture and use methane that is already being released as a pollutant	To reduce waste and lower carbon emissions
Agree	Agree	Neither agree nor disagree	e Agree	Agree	Totally agree	Agree	Agree	Neither agree	e Agree	Agree	Agree	Low price energy	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Wanting a renewable energy source that can take the place of present natural gas. Making it important for utilities to provide an energy that can replace present natual gas with it's attributes.	Let you the utility know that it is important to provide a carbon free energy source that doesn't require huge modification of a homeowner's equipment.
Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Agree	Neither agree nor disagree		Low price energy	Comfort	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Trying to use more carbon neutral fuel	Like to be a part of the process moving forward
Agree	Agree	Neither agree nor disagree	e Agree	Agree	Agree	Neither agree nor disagree	Agree	-	e Neither agree nor disagree	Agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Reliability	Comfort	Eventual majority use of energy generated from human and animal waste to heat/cool my home.	Eventually contributing to a cleane earth.
Neither agree nor disagree	Agree	Agree	Agree	Totally disagree	Neither agree nor disagree	Neither agree nor disagree	Agree	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	I want to help reduce carbon emissions as much as possible while maintaining a reliable energy source.	To help Avista reduce carbon emissions
Totally agree	Totally agree	Totally agree	Agree		Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	e Totally agree	Agree	Neither agree nor disagree	Disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source		Conserving natural resources. Lower carbon footprint compared to coal.	To promote the goals indicated in number 9.
Disagree 97	Disagree	No opinion / Not applicable	Neither agree nor disagree	Disagree	Totally disagree	Neither agree nor disagree	Disagree	No opinion / Not applicable	No opinion / Not applicable	No opinion / Not applicable	Disagree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	Coming up with better energy options to help curb impacts climate change. However, we'd ideally switch back to electric heat and appliances, and using only other renewable sources of energy like solar, hydro, and wind. Oil and natural gas are not a sustainable solution.	,
Neither agree nor disagree	Totally agree	Totally agree	Totally agree	Neither agree nor disagree	Agree	Neither agree nor disagree	Totally agree	Totally agree	Totally agree	Agree	Agree	Reliability	Comfort	Low carbon energy source	Comfort	Low carbon energy source		Reducing use of fossil fuels	Interested in reducing our dependence on fossil fuels
Totally agree	Agree	Agree	Agree	Totally agree	Totally agree	Totally agree	Agree	Totally agree	Agree	Totally agree	Agree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Comfort	to help reduce climate change	To see if all come to be true.
Disagree 00	Neither agree nor disagree		Neither agree nor disagree	Disagree	Disagree	Neither agree nor disagree			Neither agree nor disagree			Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	I want Avista to switch to totally green renewables like wind and solar. However, renewable natural gas is better than nothing.	

# Environmental Intervenors/308 Ryan/8

#### EG\_DR\_002 Attachment D - RNG 2022 Individual Responses

A	В	С	D	E	F	G	Н	I	J	К	L	М	Ν	0	Р	Q	R	S	Т
How strongly do you agree with each of these value statements associated with Natural Gas?Please choose one answer for each row.						In your opinion, does Renewable Natural Gas impact the way that you ranked each of the value statements?Please provide the ranking as it relates to Renewable Natural Gas and choose one answer for each row.							•					What do you believe you're contributing to by participating ir the Renewable Natural Gas Program?	And finally, why are you participating in the Renewable Natural Gas Program?
Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Low-cost energy source	Reliable energy source	Heats faster and more evenly than electric	High level of heating / cooling comfort	Low carbon energy source	Abundant resource	Response	Response	Response	Response	Response	Response	Open-Ended Response	Open-Ended Response
Totally agree	Totally agree	Agree	Agree	Totally agree	Agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Low price energy	Reliability	Low price energy	Low price energy	Reliability	Comfort		
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Low price energy	Reliability	Low carbon energy source	Comfort	Reliability	Low carbon energy source		
Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Totally agree	Agree	Agree	Totally agree	Totally agree	Agree	Agree	Low price energy	Reliability	Low price energy	Comfort	Low carbon energy source	Comfort	Nothing	I do not think we are participating ir this program.
Totally agree	Totally agree	Totally agree	Totally agree		Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Neither agree nor disagree	Agree	Neither agree nor disagree	Low price energy	Comfort	Low price energy	Low price energy	Reliability	Comfort	Don t know	It made sense at the beginning
Agree	Agree	_	Neither agree	Totally agree	Neither agree	Totally agree	Totally agree	Neither agree nor disagree	_	Totally agree	Neither agree nor disagree	Reliability	Reliability	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	i WANT MY HOUSEHOLD TO BE CARBON NEUTRAL. WE CURRENTLY USE A GAS BOILER BUT IF I HAVE TO PAY TO CONVERT TO AN ELECTRIC BOILER TO BE MORE CARBON NEUTRAL, I WILL EVEN IF IT COST MORE MONEY.	We all have to change the way, amount of, and kind of energy we use, or life as we know it, is slowly coming to an end which will impact our children and grandchildren in unimaginable ways. The earth's resources to support humans is not in any way shape or form sustainable. America wastes more energy than most other countries use.
Disagree	Agree	No opinion / Not applicable	Agree	Disagree	Agree	Disagree	Agree	No opinion / Not applicable	Agree	Agree	Totally agree	Reliability	Reliability	Low carbon energy source	Low price energy	Low carbon energy source	Low carbon energy source	It is important for consumers to be aware of programs that are available and to voluntarily subscribe to programs that reduce reliance on energy sources derived from fossil fuels. Please advertise this program more!!	use on the environment and contributing to a low-carbon energy future.
Neither agree nor disagree	-	e Neither agree nor disagree	Neither agree nor disagree	Disagree	Disagree	Neither agree nor disagree	Agree	-	Neither agree nor disagree	Totally agree	Totally agree	Reliability	Comfort	Low carbon energy source	Comfort	Low carbon energy source	Low carbon energy source	Creating a market for this product	Trying to do my part to reduce emmissions

# Environmental Intervenors/308 Ryan/9

## AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO.:UG-461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 021

DATE PREPARED:5/16/2023WITNESS:Kaylene SRESPONDER:Joel AnderDEPT:RegulatoryTELEPHONE:(509) 495-EMAIL:joel.anders

ED: 5/16/2023 Kaylene Schultz Joel Anderson Regulatory Affairs (509) 495-2811 joel.anderson@avistacorp.com

# **REQUEST:**

Please describe what industry association dues Avista Utilities pays for.

## **RESPONSE:**

Please see EG\_DR\_021 Attachment A for membership and dues expenses for the test period ending September 30, 2022. This attachment was also included in the case as adjustment 3.01 Membership and Dues.

#### AVISTA UTILITIES **Oregon Jurisdiction** Twelve Month Base Year Ending September 30, 2022 Memberships & Dues Summary

Purpose: this adjustment classifies membership and dues expenses by category and specific percentages are applied to determine the recoverable amounts. This calculation is similar to that which was recommended to the Company during Staff review of the December 31, 1994 Earnings Report, however the Company has applied updated allocation factors to the historic test period.

### Dues/Memberships Allocated and Direct Charges to

Account 930200 - Dues General	M&D-2	\$107,575
	-	

			Charged to		
Adjust Memberships & Dues by:	Гуре	Jur / Ser	Oregon	% Allowed	Allowed
American Gas Association	2	GDAA	80,611	75%	60,458
Western Energy Institute	2	CDAA	2,698	75%	2,024
Northwest Gas Association	2	CDAA	8,272	75%	6,204
Chamber of Commerce	3	GDOR	2,352	0%	0
NWPPA	3	CDAA	16	0%	0
Washington Roundtable	3	CDAA	1,736	0%	0
Other- Oregon Allocated, Utility Code 7 and 8	3*	CDAA/GDAA	11,890	20%	2,378
Total			107,575		71,064
		=	a		b
					Remove
					с

- Type definitions: 1 Industry research organizations: 100 % allowed
  - 2 National and regional trade organization: 75% allowed
  - Other memberships and dues: Disallowed, unless utility 3 shows just & reasonable for ratemaking
  - \* Estimated 20 % of these expenditures related to individual memberships in professional organizations directly related to their duties, and remaining expenditures are for memberships in commercial and trade-type organizations

Prep by: \_\_\_\_

Review:

FFR()	Account	
I LING	ACCOUNT	

930200

Sum of Gas South Amount	t				
Туре	Vendor Name	Service	Jurisdiction	Total	
Type 2 - AGA	AMERICAN GAS ASSOCIATION	CD	AA	-	(see Transaction detail; removed CDAA and moved to GDA
		GD	AA	80,611	
Type 2 - AGA Total				80,611	
Type 2 - WEI	WESTERN ENERGY INSTITUTE	CD	AA	2,698	
Type 2 - WEI Total				2,698	
(blank)	BUILDERS ASSOCIATION SOUTHERN OREGON	GD	OR	348	-
	Colton, Michael T	CD	AA	43	
	CORP CREDIT CARD	CD	AA	836	
	DISTRIBUTED ENERGY FINANCIAL GROUP	CD	AA	1,362	
	KCEDA	GD	OR	2,500	
	LEAGUE OF OREGON CITIES	GD	OR	300	
	Lystad, Curt A	GD	AA	83	
	Marsh, Denise Eileen	CD	AA	21	
	ROTARY CLUB OF GRANTS PASS	GD	OR	225	
	ROTARY CLUB OF MEDFORD ROGUE	GD	OR	138	
	SOREDI	GD	OR	1,375	
	UMPQUA ECONOMIC DEVELOPMENT PARTNERSH	IIGD	OR	2,500	
	UTILITIES TECHNOLOGY COUNCIL	CD	AA	1,356	
	WESTERN LAMPAC	CD	AA	182	
	MARKETING EXECUTIVES CONFERENCE	CD	AA	91	
	OREGON ECONOMIC DEVELOPMENT ASSOC	GD	OR	375	
	SOUTHERN OREGON HISTORICAL SOCIETY	GD	OR	125	
	Harding, Timothy J	GD	AA	31	
(blank) Total				11,890	-
Type 3	WASHINGTON ROUNDTABLE	CD	AA	1,736	-
Type 3 Total				1,736	-
Type 2 - NWGA	NORTHWEST GAS ASSOCIATION	CD	AA	8,272	-
Type 2 - NWGA Total				8,272	-
Type 3 - NWPPA	CORP CREDIT CARD	CD	AA	16	-
5.	NORTHWEST PUBLIC POWER ASSOCIATION	CD	AA	-	
Type 3 - NWPPA Total				16	-
Type 3 - Chamber	ASHLAND CHAMBER OF COMMERCE	GD	OR	213	-
	BOARDMAN CHAMBER OF COMMERCE	GD	OR	83	
	CENTRAL POINT CHAMBER OF COMMERCE	GD	OR	125	
	ROSEBURG AREA CHAMBER OF COMMERCE	GD	OR	220	
	SUTHERLIN AREA CHAMBER OF COMMERCE	GD	OR	63	
	THE CHAMBER OF MEDFORD / JACKSON COUNTY	GD	OR	613	
	UNION COUNTY CHAMBER OF COMMERCE	GD	OR	100	
	KLAMATH COUNTY CHAMBER OF COMMERCE	GD	OR	799	
	GRANTS PASS / JOSEPHINE COUNTY	GD	OR	138	
Type 3 - Chamber Total		-		2,352	-
Grand Total				107,575	
				,	

nting EXPENDITU		vice Jurisdictio			P Expenditure	MAC	MAC Description	Project	Project Description	Task	Task Name		FERC Account Description		re Vendor Name	Vendor	Transaction Description	Invoice Numbe		Gas North	Gas South		
d RE_ORGANI ZATION			Category		Category			Number		Number		Account		Туре		Number			Amount	Amount		Amount	Amount Type
I E01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	WASHINGTON ROUNDTABLE	6446	Washington Roundtable Membership Due	s 2161	13,520	3,869	1,736		\$19,125 Type 3
E01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	NORTHWEST PUBLIC POWER ASSOCIATION	11709	NWPPA Membership dues	68014	1,080	309	139		\$1,527 Type 3 - NWPPA
	CD CD	AA	OPER	Non-Labor	Voucher		Training/Organization Develop				Misc Gen Expense Misc Gen Expenses		MISC GENERAL EXPENSE			6445 11709	ASHLEY CALLISON-NWPPA	9031439-CC	124	35	16		\$175 Type 3 - NWPPA
			OPER	Non-Labor			Trade & Professional Assoc		Com - Trade/Professional Assoc						ASSOCIATION		NWPPA Membership dues	68014	(1,080)	(309)			(\$1,527) Type 3 - NWPPA
	CD GD	AA OR	OPER OPER	Non-Labor Non-Labor	Voucher		Trade & Professional Assoc Charitable & Civic/Comm Org		Com - Trade/Professional Assoc Oregon Community Activities		Misc Gen Expenses					5025 11062	AGA Membership dues Dues: 2022-2023 - Klamath Co, Chambe	1316107 r 776	182,280	52,156	23,404 799		\$257,840 Type 2 - AGA \$799
															COMMERCE		Per S. Vincent						Type 3 - Chamber
I V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	THE CHAMBER OF MEDFORD / JACKSON COUNTY	5173	Chamber Membership Dues	43393			613		\$613 Type 3 - Chamber
A82	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	ROSEBURG AREA CHAMBER OF COMMERCE	6281	chamber	6008936			220		\$220 Type 3 - Chamber
2 V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	ASHLAND CHAMBER OF	23497	Chamber Membership Dues	1310766			213		\$213 Type 3 - Chamber
V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	GRANTS PASS / JOSEPHINE COUNTY	13275	Chamber Membership Renewal	20760			138		\$138
V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	CENTRAL POINT CHAMBER OF	14564	Central Point Chamber Membership Dues	2056			125		Type 3 - Chamber
C83	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	COMMERCE UNION COUNTY CHAMBER OF	10288	Chamber Dues	358			100		Type 3 - Chamber \$100
V50	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org		Oregon Community Activities	930220	Comm Relations		MISC GENERAL EXPENSE		COMMERCE	93399	Chamber Membership Dues	3562			83		Type 3 - Chamber
									· · ·						COMMERCE								Type 3 - Chamber
	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org				Comm Relations				COMMERCE	91289	Chamber Membership Dues	591			63		\$63 Type 3 - Chamber
	CD CD	AA AA	OPER OPER	Non-Labor Non-Labor	Voucher Voucher	031	Trade & Professional Assoc Trade & Professional Assoc		Com - Trade/Professional Assoc Com - Trade/Professional Assoc		Misc Gen Expenses Misc Gen Expenses				NORTHWEST GAS ASSOCIATION WESTERN ENERGY INSTITUTE	27208 5221	NWGA Annual Dues WEI annual membership dues	431 9067	64,429 21,013	18,435 6,013	8,272 2,698		\$91,136 Type 2 - NWGA \$29,724 Type 2 - WEI
	CD	AA	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org		Low Income Admin All		Misc Gen Expenses				DISTRIBUTED ENERGY FINANCIAL		Dues 2022	1352	10,604	3,034			\$29,724 Type 2 - WET \$15,000
P99	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	GROUP UTILITIES TECHNOLOGY COUNCIL	105307	Tracker # 738028. (UTC): Core	190841	10,199	3,015	1,356		\$14,570
	CD	AA	OPER	Non-Labor	Voucher		Training/Organization Develop		A and G Common Training		Misc Gen Expense		MISC GENERAL EXPENSE			6445	Membership renewal 2022 ASHLEY CALLISON-WORLDATWORK		1.928	552	248		\$2 728
V50	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org		Oregon Community Activities		Comm Relations	930200	MISC GENERAL EXPENSE		UMPQUA ECONOMIC	109162	Umpqua Economic Development	2022-0011	1,320	552	2,500		\$2,500
5 V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	DEVELOPMENT PARTNERSHIP KCEDA	9943	Partnership Membership Dues Klamath County Economic Development	1413-890			2,500		\$2,500
	CD	AA	OPER	Non-Labor	Voucher		Trade & Professional Assoc		Com - Trade/Professional Assoc		Misc Gen Expenses		MISC GENERAL EXPENSE			14300	Association Membership Dues Membership dues for 2022	1230	1,414	405	182		\$2.000
	GD	OR	OPER	Non-Labor	Voucher		Department Admin Activities		Gas Oregon Admin Activity		Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	SOREDI	9941	SOREDI Annual Membership Dues	2022-27499	1,414	405	1,375		\$1,375
	CD CD	AA AA	OPER OPER	Non-Labor Non-Labor	Voucher Voucher		Training/Organization Develop Trade & Professional Assoc		A and G Common Training Com - Trade/Professional Assoc		Misc Gen Expense Misc Gen Expenses		MISC GENERAL EXPENSE MISC GENERAL EXPENSE			6445 6445	CAMEO BODEY-WORLDATWORK DEBBIE DEUBEL-OREGON STATE BAR	9647439-CC	964 923	276 264	124		\$1,364 \$1,306
																	ASSC				119		
	CD	AA	OPER	Non-Labor	Voucher	369	Corp Planning & Strategic Dir	09903691	Corporate Planning-099	930200	Misc Gen Expenses		MISC GENERAL EXPENSE		CONFERENCE	8877	Dues - 2022	LAA9986_202	8 707	202	91		\$1,000
2 S01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	DEBBIE DEUBEL-OREGON STATE BAR ASSC	9031439-CC	433	124	56		\$613
	CD	AA	OPER	Non-Labor	Voucher		Trade & Professional Assoc		Com - Trade/Professional Assoc				MISC GENERAL EXPENSE			6445	DEBBIE DEUBEL-WSBA	8889439-CC	409	117	52		\$578
	CD CD	AA AA	OPER	Non-Labor Non-Labor	Voucher Voucher		Trade & Professional Assoc Trade & Professional Assoc		Com - Trade/Professional Assoc Com - Trade/Professional Assoc		Misc Gen Expenses Misc Gen Expenses		MISC GENERAL EXPENSE MISC GENERAL EXPENSE			6445 6445	DEBBIE DEUBEL-WSBA DEBBIE DEUBEL-WSBA	9031439-CC 8889439-CC	391 373	112	50 48		\$553 \$528
	CD	AA	OPER	Non-Labor	Voucher		Trade & Professional Assoc		Com - Trade/Professional Assoc				MISC GENERAL EXPENSE			109030	Dues, Required to maintain my license to	IE16053502	338	97	43		\$478
																	practice law in the State of Washington						
	CD CD	AA	OPER	Non-Labor Non-Labor	Voucher Voucher		Trade & Professional Assoc Trade & Professional Assoc		Com - Trade/Professional Assoc Com - Trade/Professional Assoc				MISC GENERAL EXPENSE MISC GENERAL EXPENSE			6445 6445	DEBBIE DEUBEL-ID.GOV PAYMENTS DEBBIE DEUBEL-ID.GOV PAYMENTS		300 300	86	39		\$425 \$425
	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org				Comm Relations		MISC GENERAL EXPENSE		OREGON ECONOMIC	91654	Annual Membership Dues	1787	300	00	375		\$375
5 A81	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	DEVELOPMENT ASSOC BUILDERS ASSOCIATION	107848	DUES	3630			348		\$348
3 W01	CD	AA	OPER	Non-Labor	Voucher	054	Reg Pol, Prog Comp, & Comm R	el 09900541	Corporate Compliance Expenses	930200	Misc Gen Expense	930200	MISC GENERAL EXPENSE	830 Dues	SOUTHERN OREGON	6445	DEBBIE DEUBEL-SCCE/HCCA	9529439-CC	230	99	30		\$325
	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Comm Relations					56180	Membership Dues	CASH-201952	200		300		\$300
	CD	AA	OPER	Non-Labor	Voucher		Trade & Professional Assoc		Com - Trade/Professional Assoc		Misc Gen Expenses		MISC GENERAL EXPENSE			6445	DEBBIE DEUBEL-IAPP	9031439-CC	194	56	25		\$275
	GD GD	AA	OPER	Non-Labor Non-Labor	Voucher		Trade & Professional Assoc Charitable & Civic/Comm Org		Gas - Trade/Professional Assoc Oregon Community Activities		Misc Gen Expenses Comm Relations		MISC GENERAL EXPENSE		Lystad, Curt A ROTARY CLUB OF GRANTS PASS	71710	Dues, CP 2 renewal ROTARY DUES	IE15180501 3035		182	83		\$265 \$225
	GD	OR	OPER	Non-Labor	Voucher		Charitable & Civic/Comm Org Charitable & Civic/Comm Org		Oregon Community Activities		Comm Relations				ROTARY CLUB OF MEDFORD	110496	Medford Rotary Membership Dues	463			138		\$138
I V50	GD	OR	OPER	Non-Labor	Voucher	030	Charitable & Civic/Comm Org	06800301	Oregon Community Activities	930220	Comm Relations	930200	MISC GENERAL EXPENSE	830 Dues	ROGUE SOUTHERN OREGON HISTORICAL	11617	Southern Oregon Historical Society	SV4773_2021	119092250897		125		\$125
6 B51	GD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900311	Gas - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	SOCIETY Harding, Timothy J	86425	Membership Dues Dues, Annual AMPP / NACE Membersion	IE16686501		69	31		\$100
	CD CD	AA AA	OPER OPER	Non-Labor Non-Labor	Voucher		Training/Organization Develop Training/Organization Develop		A and G Common Training A and G Common Training		Misc Gen Expense Misc Gen Expense		MISC GENERAL EXPENSE MISC GENERAL EXPENSE			107640 107640	Dues, WSBA Annual License Fee/Dues Dues, WA STATE BAR ASSN -LPO	IE15453501 IE16403501	70	21	9		\$100 \$100
	CD	AA	OPER	Non-Labor	Voucher		Training/Organization Develop				Misc Gen Expense		MISC GENERAL EXPENSE			107640	LICENSE RENEW Dues, NOTARY LICENSE FEE	IE16403501	21	6	3		\$30
S01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	DEBBIE DEUBEL-WSBA	8785439-CC	19	6	3		\$27
I S01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	DEBBIE DEUBEL-OREGON STATE BAR ASSC	8889439-CC	18	5	2		\$25
I U01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	DEBBIE DEUBEL-WF4WASBASSOC SERVICE FEE	8889439-CC	10	3	1		\$14
2 U01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	DEBBIE DEUBEL-WF4WASBASSOC	9031439-CC	10	3	1		\$14
I S01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	SERVICE FEE DEBBIE DEUBEL-WF4WASBASSOC	8889439-CC	9	3	1		\$13
2 S01	CD	AA	OPER	Non-Labor	Voucher	031	Trade & Professional Assoc	09900310	Com - Trade/Professional Assoc	930200	Misc Gen Expenses	930200	MISC GENERAL EXPENSE	830 Dues	CORP CREDIT CARD	6445	SERVICE FEE DEBBIE DEUBEL-WF4WASBASSOC	8785439-CC	0	0	0		\$1
	CD	0.0															SERVICE FEE		(100.000)	(50.450)	(00.404)		(2027.040) Turne 2. Af Dook out original transporting in any state of the Angel
I E01 I E01	GD	AA AA	OPER OPER	Non-Labor Non-Labor	Voucher Voucher		Trade & Professional Assoc Trade & Professional Assoc		Com - Trade/Professional Assoc Com - Trade/Professional Assoc							5025 5025	AGA Membership dues AGA Membership dues	1316107 1316107	(182,280)	(52,156) 177,229			(\$257,840) Type 2 - A( Back out original transaction incorrectly applied to CDAA \$257,840 Type 2 - A( Apply corrected Svc/jur GDAA. Will be updated in the Company's financial syst

Accounting Period: 202110 to 202209 Expenditure Type: 830 Dues FERC: 930200

# Environmental Intervenors/310 Ryan/3

107,575

Sum of Gas South Amount	Servic	е	Jurisd	iction				
	CD		GD				Gra	nd Total
	AA		AA		OR			
Total	\$	16,613	\$	80,725	\$	10,237	\$	107,575

## AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:	Oregon	DATE PREPARED	: 06/02/2023
CASE NO:	UG 461	WITNESS:	Joe Miller
<b>REQUESTER:</b>	Env'tl Groups	<b>RESPONDER:</b>	Liz Andrews
TYPE:	Data Request	DEPT:	Regulatory Affairs
<b>REQUEST NO.:</b>	EG - 068	TELEPHONE:	(509) 495-8601
		EMAIL:	liz.andrews@avistacorp.com

## **REQUEST:**

Please provide all correspondence between Avista and the American Gas Association that the company received as a result of its membership including all emails, newsletters, reports, magazines, or any other publication.

## **RESPONSE:**

Avista objects to this question because it seeks information that is overly broad and burdensome to produce, and ambiguous in nature – not limited by time or specific subject matter.

AGA Association membership dues expensed to the Utility excludes any portion associated with lobbying activities and is further reduced another 25% per the OPUC required restating "Membership Dues Adjustment 3.01," leaving a system de minimis amount of \$60,458, or Oregon share of \$19,000 of AGA dues expense included in the Company's filing (versus a total incremental revenue requirement request of approximately \$11 million). AGA activities in the Company's filing relate to the limited minor dues expense included in the company's case and does not relate to issues outside of this scope in this proceeding, and is therefore beyond the stated scope of Petitioner's intervention.<sup>1</sup> Avista is not seeking recovery of AGA activity costs to the extent any exist (advertising, promotion, outreach, lobbying or otherwise) in this proceeding, and to produce such materials as requested in the Petitioner's request would unduly expand the scope of this proceeding.

<sup>1</sup> "Petitioners will assess the prudency of investments in gas system maintenance and expansion, policies related to new gas customer additions—especially in light of climate change, and the need to mitigate for stranded asset risks. Petitioners anticipate evaluating policies and expenditures related to energy burden, energy efficiency, weatherization, bill discount rates, and the affordability of gas utility rates for residential customers. Lastly, Petitioners will review investments into gas related advertising, promotion, and outreach efforts by Avista Utilities, to ensure all charges billed to ratepayers are appropriate. Petitioners may also address additional issues that arise in the course of this proceeding."

r	_		Determ of Ownersizetien Freemat Free		T	Î	OMB No. 1545-		
	99	<b>90</b>	Return of Organization Exempt From	incon	ne lax	-	0047		
Form			Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Cod				2021		
2			foundation Do not enter social security numbers on this form as it m						
25 Depart	ment o	of the	Go to <u>www.irs.gov/Form990</u> for instructions and the la	atest info	ormation.		Open to Public Inspection		
Treasu		of the					·		
Anter <b>F</b> a	dr <sup>R</sup> thie	en <b>202</b> 21viea	lendar year, or tax year beginning 01-01-2021 , and ending 12-31-202	1					
		applicable: change	C Name of organization AMERICAN GAS ASSOCIATION		D Employer	identi	fication number		
	ame ch				13-0431	13-0431590			
ln Fir	itial re	turn	Doing business as						
retur	n/term		Number and street (or P.O. box if mail is not delivered to street address) Room/sui	to.	E Telephone	number			
		d return ion pending	400 NI CADITOLI ST NIM 450	le	(202) 82	24-70	00		
-			City or town, state or province, country, and ZIP or foreign postal code						
			WASHINGTON, DC 200011503		G Gross recei	ipts \$ 4	1,494,768		
			F Name and address of principal officer: KAREN HARBERT		s this a group retu	urn for			
			400 N CAPITOL ST NW 450		ubordinates? Tre all subordinate	es	└ Yes ✔ No └ Yes └ No		
. To		mpt status:	WASHINGTON, DC 200011503		ncluded?				
		-	□ 501(c)(3) ▼ 501(c) ( 8 ) ◄ (Insert 10.) □ 4947(a)(1) 01 □ 527		f "No," attach a li Group exemption r				
JW	ebsit	te: 🕨 WV	VW.AGA.ORG		foup exemption i	uniber			
K For	m of o	rganization	: 🔽 Corporation 🔽 Trust 🗌 Association 💭 Other 🕨	L Year of	formation: 1971	<b>/</b> State	of legal domicile: DE		
	2, 0	J	· · · · · · · · · · · · · · · · · · ·						
Pa	art I	Sum	imary						
			escribe the organization's mission or most significant activities: AN ADVOCATE FOR NATURAL GAS UTILITY COMPANIES AND THEI			IDS N			
æ			S ACHIEVE OPERATIONAL EXCELLENCE IN THE SAFE, RELIABLE .						
anc	· ·								
E									
NOF	2	Check th	nis box 🍋 if the organization discontinued its operations or disposed (	of more t	than 25% of its ne	et asse	ets.		
8	3	Number	of voting members of the governing body (Part VI, line 1a) $\ . \ . \ .$			3	5 0		
Activities & Governance	4	Number	of independent voting members of the governing body (Part VI, line 1b)			4	4 9		
M			mber of individuals employed in calendar year 2021 (Part V, line 2a) $$ .	· ·		5	110		
Act			mber of volunteers (estimate if necessary)	• •		6	5,171		
			related business revenue from Part VIII, column (C), line 12	• • •		7a 7b	426,903		
	d	Net unre	elated business taxable income from Form 990-T, Part I, line 11	· ·	Prior Year	4	Current Year		
	8	Contribu	itions and grants (Part VIII, line 1h)			0			
Revenue			service revenue (Part VIII, line 2g)		30,287,40	6	33,283,034		
eve	10	Investm	ent income (Part VIII, column (A), lines 3, 4, and 7d )		1,159,67	5	1,171,991		
ш.	11	Other re	venue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)		1,086,39	0	1,239,001		
	12	Total rev	venue—add lines 8 through 11 (must equal Part VIII, column (A), line 12;	)	32,533,47	1	35,694,026		
	13	Grants a	nd similar amounts paid (Part IX, column (A), lines 1–3 ) $\ .$ .		547,95	0	654,065		
			paid to or for members (Part IX, column (A), line 4)			0	0		
8			, other compensation, employee benefits (Part IX, column (A), lines 5-1	0)	19,672,80	2	20,802,070		
Exp enses			onal fundraising fees (Part IX, column (A), line 11e) · · · ·			0	0		
Exp			raising expenses (Part IX, column (D), line 25)		10 707 17	4	12 520 225		
	17		<pre>kpenses (Part IX, column (A), lines 11a-11d, 11f-24e) · · · · · · · · · · · · · · · · · · ·</pre>		10,707,17	-	13,539,335		
			e less expenses. Subtract line 18 from line 12		1,605,54	-	698,556		
es es	+			Beg	ginning of Current	1	End of Year		
Net Assets or Fund Balances	1				Year	-			
Ba	20		sets ( <b>Part X</b> , line 16)		48,172,26	-	54,599,533		
und	21		bilities (Part X, line 26)		18,288,10	_	23,303,115		
	22		ets or fund balances. Subtract line 21 from line 20		29,884,16	0	31,296,418		
	art II r pen		nature Block perjury, I declare that I have examined this return, including accompan	ying sch	edules and statem	nents	and to the best of		
my k	nowle	edge and	belief, it is true, correct, and complete. Declaration of preparer (other th						
prepa	arer h		nowledge.		2022-11-12				
Sigr	<b>,</b>	Signat	ure of officer		Date				
Her			OLIVA CHIEF FINANCIAL OFFICER						
		/ Type of	or print name and title						
		F		ate	Check if PT		2		
Paie		Ļ		022-11-12	self-employed	039782	7		
Pre	par	er	irm's name 🕩 RSM US LLP		Firm's EIN 🕨 42-07	14325			
Use	e On	nly 👎	irm's address ▶ 1250 H STREET SUITE 700		Phone no. (202) 29	3-2200			
			WASHINGTON, DC 20005						
			s this return with the preparer shown above? (see instructions) · · ·				✓ Yes □ No		

For Paperwork Reduction Act Notice, see the separate instructions.

Cat. No. 11282Y

Form **990** (2021)

0.111	990 (2021)				Page 2
Par	t III Statement of Prog	ram Service Accomplishme	ents		
	Check if Schedule O cor	ntains a response or note to any lir	ne in this Part III		🔽
1	Briefly describe the organization	on's mission:			
DELI COMM CUST THEI MARK MEME	VER CLEAN NATURAL GAS TH MERCIAL AND INDUSTRIAL N OMERS - RECEIVE THEIR GA R CUSTOMERS AND PROVIDE CETERS, GATHERERS, INTERI	N, FOUNDED IN 1918, REPRESE ROUGHOUT THE UNITED STATE ATURAL GAS CUSTOMERS IN TH AS FROM AGA MEMBERS. AGA IS ES A BROAD RANGE OF PROGRA NATIONAL NATURAL GAS COMPA TY AND SECURITY, ADVANCING EANER ENERGY ECONOMY.	ES. THERE ARE MORE IE U.S., OF WHICH 95 S AN ADVOCATE FOR MS AND SERVICES FO ANIES, AND INDUSTR	THAN 77 MILLION RE 5 PERCENT - MORE TH NATURAL GAS UTILIT OR MEMBER NATURAL Y ASSOCIATES TO HE	SIDENTIAL, AN 73 MILLION Y COMPANIES AND GAS PIPELINES, LP ENSURE OUR
2	õ	e any significant program services d	luring the year which we	ere not listed on	
	the prior Form 990 or 990-EZ				Yes 🖌 No
~	If "Yes," describe these new se				
3	services?	ducting, or make significant chang	es in now it conducts, a	any program	Yes 🔽 No
	If "Yes," describe these chang				
4	expenses. Section 501(c)(3) at	ogram service accomplishments for nd 501(c)(4) organizations are req e, if any, for each program service	uired to report the amo		5
4a	(Code: ) (Ex	xpenses \$ includ	ing grants of \$	) (Revenue \$	)
		E OPERATIONS AND ENGINEERING SECTIO MMITTEES FOCUS ON HELPING NATURAL G GAS.			
4b	(Code: ) (Ex	xpenses \$ includ	ing grants of \$	) (Revenue \$	)
10		DES AGA MEMBERS WITH INFORMATION ON RESENTS THE INDUSTRY BEFORE CONGRE			
4c	(Code: ) (Ex	xpenses \$ includ	ing grants of \$	) (Revenue \$	)
	MEMBERSHIP & STRATEGIC DEVELO	DPMENT HELPS TO ENSURE AGA'S MISSION DPMENT ALSO PROVIDES OPPORTUNITIES 'HE ASSOCIATION'S ENVIRONMENT, SOCIAL	FOR INTERACTION BETWEEN	MEMBER COMPANIES AND T	
4d	Other program services (Des	scribe in Schedule O.)			
4d	Other program services (Des (Expenses \$	scribe in Schedule O.) including grants of \$	) (F	Revenue \$	)

Form 990 (2021)

Par	t IV Checklist of Required Schedules			
			Yes	No
1	Is the organization described in section 501(c)(3) or 4947(a)(1) (other than a private foundation)? If "Yes," complete Schedule A	1		No
2	Is the organization required to complete <i>Schedule B, Schedule of Contributors</i> ? See instructions.	2		No
3	Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for public office? If "Yes," complete Schedule C, <b>Part I</b>	3	Yes	
4	Section 501(c)(3) organizations. Did the organization engage in lobbying activities, or have a section 501(h) election in effect during the tax year? If "Yes," complete Schedule C, Part II	4		
5	Is the organization a section 501(c)(4), 501(c)(5), or 501(c)(6) organization that receives membership dues, assessments, or similar amounts as defined in Rev. Proc. 98-19? <i>If "Yes," complete Schedule C, Part III</i> 🗐.	5	Yes	
6	Did the organization maintain any donor advised funds or any similar funds or accounts for which donors have the right to provide advice on the distribution or investment of amounts in such funds or accounts? <i>If "Yes," complete Schedule D</i> , Part I	6		No
7	Did the organization receive or hold a conservation easement, including easements to preserve open space, the environment, historic land areas, or historic structures? <i>If "Yes," complete Schedule D, Part II</i>	7		No
8	Did the organization maintain collections of works of art, historical treasures, or other similar assets? <i>If "Yes,"</i> complete Schedule D, Part III 🗐 .	8		No
9	Did the organization report an amount in Part X, line 21 for escrow or custodial account liability; serve as a custodian for amounts not listed in Part X; or provide credit counseling, debt management, credit repair, or debt negotiation services? If "Yes," complete Schedule D, Part IV 🗐	9		No
10	Did the organization, directly or through a related organization, hold assets in temporarily restricted endowments, permanent endowments, or quasi endowments? <i>If "Yes," complete Schedule D, Part V</i>	10		No
11	If the organization's answer to any of the following questions is "Yes," then complete Schedule D, Parts VI, VII, VIII, IX, or X, as applicable.			
	Did the organization report an amount for land, buildings, and equipment in <b>Part X</b> , line 10? <i>If "Yes," complete Schedule D</i> , <b>Part VI</b> . 😼	11a	Yes	
	Did the organization report an amount for investments—other securities in <b>Part X</b> , line 12 that is 5% or more of its total assets reported in <b>Part X</b> , line 16? <i>If "Yes," complete Schedule D</i> , <b>Part VII</b> 🗐	11b		No
С	Did the organization report an amount for investments—program related in <b>Part X</b> , line 13 that is 5% or more of its total assets reported in <b>Part X</b> , line 16? <i>If "Yes," complete Schedule D</i> , <b>Part VIII</b> 😼	11c		No
d	Did the organization report an amount for other assets in <b>Part X</b> , line 15 that is 5% or more of its total assets			
	reported in Part X, line 16? If "Yes," complete Schedule D, Part IX 🗐	11d		No
	Did the organization report an amount for other liabilities in <b>Part X</b> , line 25? <i>If "Yes," complete Schedule D, Part X</i>	11e	Yes	
	Did the organization's separate or consolidated financial statements for the tax year include a footnote that addresses the organization's liability for uncertain tax positions under FIN 48 (ASC 740)?	11f		No
12a	භ්ẩሃඈም ማሚጠበደቱ፤ ፅଜስመፅሀል የመስት የመስት የሚያስት የ	12a		No
b	Was the organization included in consolidated, independent audited financial statements for the tax year? If "Yes," and if the organization answered "No" to line 12a, then completing Schedule D, Parts XI and XII is optional 🗐	12b	Yes	
13	Is the organization a school described in section 170(b)(1)(A)(ii)? If "Yes," complete Schedule E	13		No
14a	Did the organization maintain an office, employees, or agents outside of the United States?	14a		No
b	Did the organization have aggregate revenues or expenses of more than \$10,000 from grantmaking, fundraising, business, investment, and program service activities outside the United States, or aggregate foreign investments valued at \$100,000 or more? <i>If "Yes," complete Schedule F, Parts I and IV</i>	14b	Yes	
15	Did the organization report on Part R column (A), line 3, more than \$5,000 of grants or other assistance to or for any foreign organization? If "Yes," complete Schedule F, Parts II and IV	15	Yes	
16	Did the organization report on <b>Part IX</b> , column (A), line 3, more than \$5,000 of aggregate grants or other assistance to or for foreign individuals? <i>If "Yes," complete Schedule F, Parts III and IV</i>	16		No
17	Did the organization report a total of more than \$15,000 of expenses for professional fundraising services on <b>Part IX</b> , column (A), lines 6 and 11e? <i>If "Yes," complete Schedule G, <b>Part I.</b></i> See instructions.	17		No
18	Did the organization report more than \$15,000 total of fundraising event gross income and contributions on <b>Part VIII</b> , lines 1c and 8a? <i>If "Yes," complete Schedule G, <b>Part II</b></i>	18		No
19	Did the organization report more than \$15,000 of gross income from gaming activities on <b>Part VIII</b> , line 9a? <i>I f</i> "Yes," complete Schedule G, <b>Part III</b>	19		No
20a	Did the organization operate one or more hospital facilities? If "Yes," complete Schedule H	20a		No
b	If "Yes" to line 20a, did the organization attach a copy of its audited financial statements to this return?	20b		
21	Did the organization report more than \$5,000 of grants or other assistance to any domestic organization or domestic government on Part IX, column (A), line 1? <i>If "Yes," complete Schedule I, Parts I and II</i>	21	Yes	

# Environmental Intervenors/312

Form 990 (2021)

Pa	rt IV Checklist of Required Schedules (continued)	-		
			Yes	No
22	Did the organization report more than \$5,000 of grants or other assistance to or for domestic individuals on <b>Part IX</b> , column (A), line 2? <i>If "Yes," complete Schedule I, Parts I and III</i>	22		No
23	Did the organization answer "Yes" to <b>Part VII</b> , Section A, line 3, 4, or 5, about compensation of the organization's current and former officers, directors, trustees, key employees, and highest compensated employees? <i>If "Yes," complete Schedule J</i>	23	Yes	
24a	Did the organization have a tax-exempt bond issue with an outstanding principal amount of more than \$100,000 as of the last day of the year, that was issued after December 31, 2002? <i>If "Yes," answer lines 24b through 24d and complete Schedule K. If "No," go to line 25a</i>	24a		No
b	Did the organization invest any proceeds of tax-exempt bonds beyond a temporary period exception?	24b		
с	Did the organization maintain an escrow account other than a refunding escrow at any time during the year to defease any tax-exempt bonds?	24c		
d	Did the organization act as an "on behalf of" issuer for bonds outstanding at any time during the year?	24d		
25a	Section 501(c)(3), 501(c)(4), and 501(c)(29) organizations. Did the organization engage in an excess benefit transaction with a disqualified person during the year? If "Yes," complete Schedule L, Part I	25a		
b	Is the organization aware that it engaged in an excess benefit transaction with a disqualified person in a prior year, and that the transaction has not been reported on any of the organization's prior Forms 990 or 990-EZ? <i>If "Yes," complete Schedule L</i> , <b>Part I</b>	25b		
26	Did the organization report any amount on Part X; line 5 or 22 for receivables from or payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons?	26		No
27	bid <sup>y</sup> the "Aganlethish betwhether and the sessistance to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or employee thereof, a grant selection committee member, or to a 35% controlled entity (including an employee thereof) or family member of any of these persons? If "Yes," completeSchedule L,Part III	27		No
28	Was the organization a party to a business transaction with one of the following parties (see the Schedule L,			
	Part IV instructions for applicable filing thresholds, conditions, and exceptions):			
а	A current or former officer, director, trustee, key employee, creator or founder, or substantial contributor? <i>If "Yes," complete Schedule L</i> , <i>Part IV</i> .			
		28a		No
b	A family member of any individual described in line 28a? If "Yes," complete Schedule L, Part IV	28b		No
с	A 35% controlled entity of one or more individuals and/or organizations described in line 28a or 28b? If "Yes," complete Schedule L, Part IV	28c		No
29	Did the organization receive more than $25,000$ in non-cash contributions? If "Yes," complete Schedule M .	29		No
30	Did the organization receive contributions of art, historical treasures, or other similar assets, or qualified			No
31	conservation contributions? bid <sup>y</sup> fffe ଁନଫୁଅନୀ2tମiରିନୀfiduldade, terminate, or dissolve and cease operations? <i>If "Ye</i> s, <i>" complete Schedule N, <b>Part I</b></i>	30		
32	Did the organization sell, exchange, dispose of, or transfer more than 25% of its net assets? If "Yes," complete	31		No
32		32		No
33	Did the organization own 100% of an entity disregarded as separate from the organization under Regulations sections 301.7701-2 and 301.7701-3?	33		No
34	ฟ์ลังัจก็ตั้งสุดิษัสก์มีคนิปส์ เรียว์ไห่ง tax-exempt or taxable entity? If "Yes," complete Schedule R, <b>Part II</b> , III, or IV, and <b>Part V</b> , line 1	34	Yes	
35a	Did the organization have a controlled entity within the meaning of section 512(b)(13)?	35a	Yes	
b	If 'Yes' to line 35a, did the organization receive any payment from or engage in any transaction with a controlled entity within the meaning of section 512(b)(13)? If "Yes," complete Schedule R, Part V, line $2$ $\mathfrak{B}$	35b	Yes	
36	Section 501(c)(3) organizations. Did the organization make any transfers to an exempt non-charitable related organization? If "Yes," complete Schedule R, Part V, line 2	36		
37	Did the organization conduct more than 5% of its activities through an entity that is not a related organization and that is treated as a partnership for federal income tax purposes? If "Yes," complete Schedule R, Part VI 🔞	37		No
38	Did the organization complete Schedule O and provide explanations on Schedule O for <b>Part VI</b> , lines 11b and 19? <b>Note.</b> All Form 990 filers are required to complete Schedule O.	38	Yes	
Pa	rt V Statements Regarding Other IRS Filings and Tax Compliance			
	Check if Schedule O contains a response or note to any line in this Part V		 Yes	. No
1 <i>ɛ</i>	Enter the number reported in box 3 of Form 1096. Enter -0- if not applicable 1a 46		162	
	Enter the number of Forms W-2G included on line 1a. Enter -0- if not applicable . <b>1b</b> 0			
с	Did the organization comply with backup withholding rules for reportable payments to vendors and reportable			

# Ryan/4

Page	4
------	---

Form	990 (2021)			Page <b>5</b>
Pa	tV Statements Regarding Other IRS Filings and Tax Compliance (continued)			
2a	Enter the number of employees reported on Form W-3, Transmittal of Wage and Tax Statements, filed for the calendar year ending with or within the year covered by this return			
b	If at least one is reported on line 2a, did the organization file all required federal employment tax returns? Note. If the sum of lines 1a and 2a is greater than 250, you may be required to e-file. See instructions.	2b	Yes	
3a	Did the organization have unrelated business gross income of \$1,000 or more during the year?	3a	Yes	
	If "Yes," has it filed a Form 990-T for this year? If "No" to line 3b, provide an explanation in Schedule O	3b	Yes	
	At any time during the calendar year, did the organization have an interest in, or a signature or other authority over, a financial account in a foreign country (such as a bank account, securities account, or other financial	4a		No
b	都にびを取け) 創れます the name of the foreign country: トーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーーー			
5a	Was the organization a party to a prohibited tax shelter transaction at any time during the tax year? .	5a		No
	Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?	5b		No
с	If "Yes," to line 5a or 5b, did the organization file Form 8886-T?	50 50		
	Does the organization have annual gross receipts that are normally greater than \$100,000, and did the	6a	Yes	
	organization solicit any contributions that were not tax deductible as charitable contributions? If "Yes," did the organization include with every solicitation an express statement that such contributions or gifts	00	103	
_	were not tax deductible?	6b	Yes	
7	Organizations that may receive deductible contributions under section 170(c).			
а	Did the organization receive a payment in excess of \$75 made partly as a contribution and partly for goods and services provided to the payor?	7a		
b	If "Yes," did the organization notify the donor of the value of the goods or services provided? $\ldots$ .	7b		
С	Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it was required to file Form 8282?	7c		
d	If "Yes," indicate the number of Forms 8282 filed during the year 7d			
e	Did the organization receive any funds, directly or indirectly, to pay premiums on a personal benefit contract?	7e		
f	Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contract?	7 f		
g	If the organization received a contribution of qualified intellectual property, did the organization file Form 8899 as required?	7g		
h	If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organization file a Form 1098-C?	7h		
8	Sponsoring organizations maintaining donor advised funds. Did a donor advised fund maintained by the sponsoring organization have excess business holdings at any time during the year?	8		
9	Sponsoring organizations maintaining donor advised funds.			
а	Did the sponsoring organization make any taxable distributions under section 4966?	9a		
b	Did the sponsoring organization make a distribution to a donor, donor advisor, or related person? . $\$ .	9b		
10	Section 501(c)(7) organizations. Enter:			
а	Initiation fees and capital contributions included on Part VIII, line 12 10a			
b	Gross receipts, included on Form 990, Part VIII, line 12, for public use of club 10b			
11	Section 501(c)(12) organizations. Enter:			
	Gross income from members or shareholders     11a       Gross income from other sources. (Do not net amounts due or paid to other			
Ð	sources against amounts due or received from them.)			
12a	Section 4947(a)(1) non-exempt charitable trusts. Is the organization filing Form 990 in lieu of Form 1041?	12a		
b	If "Yes," enter the amount of tax-exempt interest received or accrued during the year.			
13	Section 501(c)(29) qualified nonprofit health insurance issuers.			
а	Is the organization licensed to issue qualified health plans in more than one state?	13a		
	Note. See the instructions for additional information the organization must report on Schedule O.			
b	Enter the amount of reserves the organization is required to maintain by the states in which the organization is licensed to issue qualified health plans			
с	Enter the amount of reserves on hand			
14a	Did the organization receive any payments for indoor tanning services during the tax year?	14a		No
	If "Yes," has it filed a Form 720 to report these payments? <i>If "No," provide an explanation in Schedule O</i> .	14b		
15	Is the organization subject to the section 4960 tax on payment(s) of more than \$1,000,000 in remuneration or excess parachute payment(s) during the year?	15	Yes	
16	Is "Meso" gazeizationsatruetionationational files Fibration 17200 bj&chedutleeNsection 4968 excise tax on net investment income?	16		No
17	If "Yes," complete Form 4720, Schedule O. Section 501(c) (21) organizations. Did the trust, any disqualified person, or mine operator engage in any activities that would result in the imposition of an excise tax under section 4951, 4952, or 4953? If "Yes," complete Form 6069.	17		

Environmental Intervenors/312	2
Ryan/6	6

-	
Page	6

Form	990 (2021)			Page <b>6</b>
Par	t VI Governance, Management, and Disclosure. For each "Yes" response to lines 2 through 7b below, and for a "No" r 8a, 8b, or 10b below, describe the circumstances, processes, or changes in Schedule O. See instructions. Check if Schedule O contains a response or note to any line in this Part VI	espons 	e to line	es . 🔽
Se	ction A. Governing Body and Management			
15	Enter the number of voting members of the governing body at the end of the tax <b>1a</b> 50		Yes	No
14	Image: Weak of the governing body at the end of the tax     Image: Solution of the governing body at the end of the tax       Image: Solution of the governing body of the governing body of the governing body of the governing body delegated broad authority to an executive committee or similar committee, explain in Schedule O.			
b	Enter the number of voting members included in line 1a, above, who are independent 1b 49			
2	Did any officer, director, trustee, or key employee have a family relationship or a business relationship with any other officer, director, trustee, or key employee?	2		No
3	Did the organization delegate control over management duties customarily performed by or under the direct supervision of officers, directors or trustees, or key employees to a management company or other person?	3		No
4	Did the organization make any significant changes to its governing documents since the prior Form 990 was	4		No
5	${ m blad}^{ m blad}$ the organization become aware during the year of a significant diversion of the organization's assets? .	5		No
6	Did the organization have members or stockholders?	6	Yes	
7a	Did the organization have members, stockholders, or other persons who had the power to elect or appoint one or more members of the governing body?	7a	Yes	
b	Are any governance decisions of the organization reserved to (or subject to approval by) members, stockholders, or persons other than the governing body?	7b	Yes	
8	Did the organization contemporaneously document the meetings held or written actions undertaken during the year by the following:			
а	The governing body?	8a	Yes	
b	Each committee with authority to act on behalf of the governing body?	8b	Yes	
9	Is there any officer, director, trustee, or key employee listed in <b>Part VII</b> , Section A, who cannot be reached at the organization's mailing address? If "Yes," provide the names and addresses in Schedule O	9		No
Se	ction B. Policies (This Section B requests information about policies not required by the Internal F	Reven	ue Coc	le.)
			Yes	No
10a	Did the organization have local chapters, branches, or affiliates?	10a		No
b	If "Yes," did the organization have written policies and procedures governing the activities of such chapters, affiliates, and branches to ensure their operations are consistent with the organization's exempt purposes?	10b		
11a	Has the organization provided a complete copy of this Form 990 to all members of its governing body before filing the form?	11a	Yes	
b	Describe on Schedule O the process, if any, used by the organization to review this Form 990.			
12a	Did the organization have a written conflict of interest policy? If "No," go to line 13	12a	Yes	
b	Were officers, directors, or trustees, and key employees required to disclose annually interests that could give rise to conflicts?	12b	Yes	
с	Did the organization regularly and consistently monitor and enforce compliance with the policy? If "Yes," describe on Schedule O how this was done	12c	Yes	
13	Did the organization have a written whistleblower policy?	13	Yes	
14	Did the organization have a written document retention and destruction policy?	14	Yes	
15	Did the process for determining compensation of the following persons include a review and approval by independent persons, comparability data, and contemporaneous substantiation of the deliberation and decision?			
а	The organization's CEO, Executive Director, or top management official	15a	Yes	
b	Other officers or key employees of the organization	15b	Yes	
	If "Yes" to line 15a or 15b, describe the process on Schedule O. See instructions.			
16a	Did the organization invest in, contribute assets to, or participate in a joint venture or similar arrangement with a taxable entity during the year?	16a		No
b	If "Yes," did the organization follow a written policy or procedure requiring the organization to evaluate its participation in joint venture arrangements under applicable federal tax law, and take steps to safeguard the			
	organization's exempt status with respect to such arrangements?	16b		
Se	ction C. Disclosure			
17	List the states with which a copy of this Form 990 is required to be filed			
18	Section 6104 requires an organization to make its Form 1023 (1024 or 1024-A, if applicable), 990, and 990-T (section 501(c)(3)s only) available for public inspection. Indicate how you made these available. Check all that apply.			

- 🗌 Own website 🔲 Another's website 📝 Upon request 🔲 Other (explain in Schedule O)
- 19 Describe in Schedule O whether (and if so, how) the organization made its governing documents, conflict of interest policy, and financial statements available to the public during the tax year.
- State the name, address, and telephone number of the person who possesses the organization's books and records: 20 DOUG ALLEN 400 N CAPITOL ST NW 450 WASHINGTON, DC 200011503 (202) 824-7000

Form 990 (	(2021) Page <b>7</b>
Part VII	Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent Contractors
	Check if Schedule O contains a response or note to any line in this Part VII
Section	A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees
1 - C	a this table for all persons required to be listed. Depart componentian for the calender year anding with or within the organization's

1a Complete this table for all persons required to be listed. Report compensation for the calendar year ending with or within the organization's tax year. List all of the organization's current officers, directors, trustees (whether individuals or organizations), regardless of amount

of compensation. Enter -0- in columns (D), (E), and (F) if no compensation was paid.

• List all of the organization's current key employees, if any. See the instructions for definition of "key employee."

• List the organization's five current highest compensated employees (other than an officer, director, trustee or key employee) who received reportable compensation (box 5 of Form W-2, Form 1099-MISC, and/or box 1 of Form 1099-NEC) of more than \$100,000 from the

organization and any related organizations.

• List all of the organization's former officers, key employees, or highest compensated employees who received more than \$100,000 of reportable compensation from the organization and any related organizations.

• List all of the organization's former directors or trustees that received, in the capacity as a former director or trustee of the

organization, more than \$10,000 of reportable compensation from the organization and any related organizations.

See the instructions for the order in which to list the persons above.

🥅 Check this box if neither the organization nor any related organization compensated any current officer, director, or trustee.

(A) Name and title	(B) Average hours per week (list any hours for related	m unle:	ore tl ss pe	han rsor cer a	not one nis and			(D) Reportable compensation from the organization (W-2/1099-	(E) Reportable compensation from related organizations (W-2/1099-	(F) Estimated amount of other compensation from the organization
	organizations below dotted line)	Individual trustee or director	Institutional Trustee	Officer	Key employee	Highest compensated employee	Former	MISC/1099- NEC)	MISC/1099- NEC)	and related organizations
(1) KAREN HARBERT PRESIDENT & CEO	35.00	х		х				2,480,041	0	373,017
(2) DAVID H ANDERSON CHAIR	5.00	х		x				0	0	0
(3) KIMBERLY S GREENE FIRST VICE CHAIR	4.00	х		×				0	0	0
(4) SUZANNE SITHERWOOD SECOND VICE CHAIR	3.00	x		×				0	0	0
(5) DIANE LEOPOLD IMMEDIATE PAST CHAIR	2.00	х						0	0	0
(6) KURT ADAMS DIRECTOR	1.00	х						0	0	0
(7) KEVIN AKERS DIRECTOR	1.00	х						0	0	0
(8) WILLIAM J AKLEY DIRECTOR	1.00	х						0	0	0
(9) FRANK ALMARAZ DIRECTOR	1.00	х						0	0	0
(10) ARUN BANSKOTA DIRECTOR	1.00	х						0	0	0
(11) DAVID P BAUER DIRECTOR	1.00	х						0	0	0
(12) ROBERT F BEARD DIRECTOR	1.00	x						0	0	0
(13) LONNIE E BELLAR DIRECTOR	1.00	x						0	0	0
(14) KELCEY A BROWN DIRECTOR	1.00	х						0	0	0
(15) TIMOTHY P CAWLEY DIRECTOR	1.00	×						0	0	0
(16) DAVID M DALY DIRECTOR	1.00	х						0	0	0
(17) SCOTT E DOYLE DIRECTOR	1.00	х						0	0	0

Form 990 (2021)

Part VII Section A. Officers, Director (A)	(B)			(C)	,			(D)	(E)	(F)		
Name and title	Average hours per week (list any hours for related organizations	rr unle	ition ore t ss pe offi direct	han rsor cer a	one n is l and rust	box, both a ee)	an	Reportable compensation from the organization (W-2/1099- MISC/1099-	Reportable compensation from related organizations (W-2/1099- MISC/1099-	Estimated amount of othe compensation from the organization and related		
	below dotted line)	Individual trustee or director	Institutional Trustee	Officer	Key employee	Highest compensated employee	Former	NEC)	NEC)	organizations		
(18) SCOTT D DRURY DIRECTOR	1.00	х				_		0	0			
(19) LINDEN EVANS DIRECTOR	1.00	x						o	0			
(20) ROBERT FRENZEL DIRECTOR	1.00	x						0	٥			
DIRECTOR (21) JOSEPH HAMROCK DIRECTOR	1.00	x						0	٥			
(22) CYNTHIA HANSEN	1.00	x						0	0			
DIRECTOR (23) JEFFREY A HARRISON	1.00	x						0				
DIRECTOR (24) JOHN P HESTER	1.00	x										
DIRECTOR (25) JEFFRY M HOUSEHOLDER	1.00	^						0				
DIRECTOR (26) MICHAEL HUWAR	1.00											
DIRECTOR (27) MICHAEL INNOCENZO	1.00	×						0	0			
DIRECTOR (28) BLUE JENKINS	1.00	x						0	0			
DIRECTOR (29) BADAR KHAN		×						0	0			
DIRECTOR	1.00	×						0	0			
(30) MARY KIPP DIRECTOR (31) NICOLE A KIVISTO	1.00	×						0	٥			
DIRECTOR	1.00	x						0	o			
(32) JAMES P LAURITO DIRECTOR	1.00	x						o	٥			
(33) RICHARD J MARK DIRECTOR	1.00	x			$\lfloor  \rfloor$			0	٥			
(34) CHARLES MATTHEWS DIRECTOR	1.00	x						0	0			
(35) SID MCANNALLY DIRECTOR	1.00	x						0	٥			
DIRECTOR (36) PAUL W NESTER DIRECTOR	1.00	x						0	0			
DIRECTOR (37) JERRY NORCIA DIRECTOR	1.00	x						0	٥			
(38) MELISSA ORSEN	1.00	x						0	0			
DIRECTOR (39) PATRICIA K POPPE	1.00	x						0	0			
DIRECTOR (40) FRANKLYN D REYNOLDS	1.00	×						0				
DIRECTOR	1.00								,			
(41) GARRICK J ROCHOW DIRECTOR (42) ROBERT C ROWE	1.00	x						0	0			
DIRECTOR		×						0	0			
(43) DAVID SLATER DIRECTOR (44) TJ SZELISTOWSKI	1.00	×						0	0			
DIRECTOR	1.00	×						0	0			
DIRECTOR	1.00	x						0	٥			
(46) CHARLES S WARRINGTON DIRECTOR	1.00	x						0	٥			
(47) KIMBERLY S WATSON DIRECTOR	1.00	x						0	٥			
(48) SASHA WEINTRAUB DIRECTOR	1.00	x						0	٥			
(49) STEPHEN D WESTHOVEN DIRECTOR	1.00	×						0	٥			
(50) CRAIG E WHITE DIRECTOR	1.00	×						0	o			
(51) LORI TRAWEEK CHIEF OPERATING OFFICER	35.00			×				846,869	٥	260,55		
(52) KEVIN HARDARDT CHIEF FINANCIAL & ADM OFF (TO 6/21)	35.00			×				936,566	0	157,13		
(53) TERRI OLIVA	35.00			×				177,838	0	13,84		
CHIEF FINANCIAL OFFICER (FROM 8/21) (54) EDITH NAEGELE //ICE PRESIDENT & CORP SEC(FROM 11/21)	35.00			×				101,996	٥	8,00		
(55) GARY GARDNER	35.00			×				440,527	0	109,94		
VICE PRESIDENT & CORP SEC (TO 12/21) (56) CHRISTINA SAMES SVP, O&E	35.00				x			503,150	0	176,13		
(57) MIKE MURRAY	35.00					v				71.49		
SENERAL COUNSEL (58) GEORGE LOWE	35.00		-	$\vdash$	┢	x	-	488,671	0	-		
VP, GOVERNMENT RELATIONS (59) JENNIFER O'SHEA	35.00		-	$\vdash$		x	_	447,934	0	81,90		
VICE PRESIDENT, COMMUNICATIONS	35.00					х		287,647	0	92,35		
VICE PRESIDENT, ADVDCACY & OUTREACH (61) MEGAN DUNN						х		287,150	0	31,26		
VICE PRESIDENT, TALENT OPERATIONS	35.00					х		279,263	0	59,19		
1b Sub-Total . c Total from continuation sheets to Part V	II, Section A				*	·i						
d Total (add lines 1b and 1c)	but not limited t	o thos	e liste	ed a	bove		o re	7,277,652 ceived more than	0	1,434,8		
\$100,000 of reportable compensation	from the organi	zation	► 5 T							Yes No		
<ol> <li>Did the organization list any former of on line 1a? If "Yes," complete Schedule</li> <li>For any individual listed on line 1a, is in organization and related organizations individual</li> </ol>	J for such indivi	dual .			÷		-		rom the			
5 Did any person listed on line 1a receiv	e or accrue com	 pensal	ion fi	rom	any	unre	late	d organization or i	individual for	Yes		
services rendered to the organization? Section B. Independent Contract	'If "Yes," comple	te Sche	edule	J for	suc	h per	son		5	No		
Complete this table for your five higher compensation from the organization. R	est compensated eport compensa	l indep tion fo	ende r the	nt c cale	ontr ndar	actor r year	s th r en	at received more ding with or within	the organization	s tax year.		
	(A) business address							Descrip	(B) tion of services ONS CREATIVE	(C) Compensation 410,90		
								SERVICES		410,90		
1101 15TH STREET NW	1101 15TH STREET NW WASHINGTON, DC 20005											
1101 15TH STREET NW WASHINGTON, DC 20005 ICF RESOURCES LLC		ICF RESOURCES LLC CONSULTING SERVICES										
1101 15TH STREET NW WASHINGTON, DC 20005 ICF RESOURCES LLC								ONLINE MAGA	ERVICES	397,80		
1101 15TH STREET NW MASHINGTON, D.C. 20005 ICF RESOURCES LLC 7300 LEE HIGHWAY AIRFAX, MA. 22031						_		ONLINE MAGAJ DESIGN SERV				

MARLA SOTTING & LOCAL THIS & SOTTING & MOSTING SERVICES 152.400
DEPT 3303 PR 00X 12303
DAULAS. TX 7331240
2 Total number of independent contractors (including but not limited to those listed above) who received more than
\$100.000 of comensation from the organization ▶ 13

	990 (2021)								Page <b>9</b>
Par		t of Revenue edule 0 contains a res	ponse or not	e to a	anv line in this <b>Par</b>	t VIII			
					(A) Total revenue	(B) Related exem functi reven	d or pt on	<b>(C)</b> Unrelated business revenue	(D) Revenue excluded from tax under sections 512 - 514
Contr	ibutions, Gifts, Grant:	s, and OtherAmt Simi	ar Amounts	b M c F d R e G	ederated campaig Membership dues undraising events telated organizatio iovernment grants (cor II other contributions, g nd similar amounts not	ns ns itributions) jifts, grants,	1a 1b 1c 1d 1e		
				g N li	bove loncash contributions ir nes 1a - 1f:\$ otal. Add lines 1a-	cluded in	1f 1g		
			Business C		28,579,115	2	8,579,115		
enne	2a MEMBERSHIP DUES			0099	3,235,016		3,235,016		
Program Service Revenue	c SPONSORSHIPS		90	0099	724,000		724,000		
Servi	d PROGRAM PARTICIPA	ATION	90	0099	220,000		220,000		
ogran	e PUBLICATIONS		54	1800	215,518			215,51	В
£.	f All other program	n service revenue.			309,385		98,000	211,38	5
	9 Total. Add lines 3 Investment incomother	2a-2f e (including dividends	33,28 , interest, ar	_	442,70	o			442,700
		stment of tax-exempt	bond procee	ds 🖡	1 000 00	1			1,239,001
	<ul> <li>6a Gross rents</li> <li>b Less: rental expenses</li> </ul>	(i) Real 6a 6b	(ii) Perso		-				
	7a Gross amount from sales of assets other	6c           ne or (loss)           (i) Securities           7a         6,529,833	(ii) Oth	er► 20	2 2 2				
	than inventory b Less: cost or other basis and sales expenses c Gain or (loss)	7b 5,798,548		2,19	-				
	c Gain or (loss) d Net gain or (loss			• 1,77	729,29	1			729,291
Other Revenue	contributions reporte See Part IV, line 18 b Less: direct expe	d on line 1c). 8a enses 8b			_				
Other	c Net income or (ic 9a Gross income fro	oss) from fundraising e	events	•					
	activities. See Part IV, line b Less: direct expe	9a	vities	•	-				
	10a Gross sales of in returns and allow b Less: cost of goo	ventory, less vances 10a ods sold 10b		-					
		oss) from sales of inve		•					
	Miscellaned 11a	ous Revenue	Business (	ode					
	b								
	с								
	d All other revenue			•	1				
		11a-11d ee instructions			35,694,02	6	32,856,131	426,90	3 2,410,992
	1				33,094,02	- ·	uz,uuu, 13 l	420,90	2,410,992

Page **10** 

Form 990 (2021)				Page <b>1</b> 0
Part IX Statement of Functional Expenses	t complete all colur	and All other organ	aizations must compl	ata column (A)
Section 501(c)(3) and 501(c)(4) organizations mus				ete column (A).
Check if Schedule O contains a response or note to	any line in this Par			· · · ·
Do not include amounts reported on lines 6b, 7b, 8b, 9b, and 10b of <b>Part VIII</b> .	(A) Total expenses	<b>(B)</b> Program service expenses	(C) Management and general expenses	(D) Fundraising expenses
1 Grants and other assistance to domestic organizations and domestic governments. See Part IV, line 21	629,065			
2 Grants and other assistance to domestic individuals. See Part IV, line 22				
3 Grants and other assistance to foreign organizations, foreign governments, and foreign individuals. See Part IV, lines 15 and 16.	25,000			
4 Benefits paid to or for members				
5 Compensation of current officers, directors, trustees, and key employees	6,600,130			
6 Compensation not included above, to disqualified persons (as defined under section 4958(f)(1)) and persons described in section 4958(c)(3)(B)				
7 Other salaries and wages	11,821,053			
<ul> <li>8 Pension plan accruals and contributions (include section 401(k) and 403(b) employer contributions)</li> </ul>				
· · · · ·	1 0 17 00-	1	I	
9 Other employee benefits	1,347,227			
10 Payroll taxes	1,033,660			
11 Fees for services (non-employees):				
<b>a</b> Management				
bLegal	339,177			
<b>c</b> Accounting	143,466			
d Lobbying	523,036			
e Professional fundraising services. See Part IV, line 17				
f Investment management fees	31,357			
g Other (If line 11g amount exceeds 10% of line 25, column (A) amount, list line 11g expenses on Schedule O)	2,870,453			
12 Advertising and promotion	302,760		1	
13 Office expenses	525,589			
	643,246			
14 Information technology	043,240			
15 Royalties	1 071 200			
<b>16</b> Occupancy	1,871,398			
17 Travel	351,056			
18 Payments of travel or entertainment expenses for any federal, state, or local public officials				
19 Conferences, conventions, and meetings	3,339,888			
20 Interest				
21 Payments to affiliates				
22 Depreciation, depletion, and amortization	707,323			
23 Insurance	30,536			
24 Other expenses. Itemize expenses not covered above (List miscellaneous expenses in line 24e. If line 24e amount exceeds 10% of line 25, column (A) amount, list line 24e expenses on Schedule 0.)				
a MEMBERSHIPS & SPONSORSH	764,190			
	500.744			
b EXCISE TAX ON EXECUTIVE	523,746 353,589			
c EMPLOYEE BENEFITS ADMIN	333,309			
d SUBSCRIPTIONS	182,978			
e All other expenses	35,547			
25 Total functional expenses. Add lines 1 through 24e	34,995,470			
<ul> <li>26 Joint costs. Complete this line only if the organization reported in column (B) joint costs from a combined educational campaign and fundraising solicitation. Check here ▶ □ if following SOP 98-2 (ASC 958-720).</li> </ul>				

Page II
---------

Form	990	(2021)
1 01111	//0	(2021)

Pa	art X	Balance Sheet					
		Check if Schedule O contains a response or	note to	any line in this Part IX .			[
					<b>(A)</b> Beginning of year		<b>(B)</b> End of year
	1	Cash-non-interest-bearing		1			
	2	Savings and temporary cash investments			7,113,951	2	9,264,097
	3	Pledges and grants receivable, net				3	
	4	Accounts receivable, net			1,328,542	4	784,806
	5	Loans and other receivables from any current					
		trustee, key employee, creator or founder, su controlled entity or family member of any of t				5	
	6	Loans and other.receivables from other disqu under section 4958(f)(1)), and persons desc	alified	persons (as defined		6	
10	7	Notes and loans receivable, net				7	
Assets	8	Inventories for sale or use				8	
SS	9	Prepaid expenses and deferred charges .			1,304,042	9	1,244,562
A					.,		.,,oo_
	Tod	other basis. Complete <b>Part VI</b> of Schedule D	10a	8,330,703			
	b	Less: accumulated depreciation	10b	3,345,709	5,202,520	10c	4,984,994
	11	Investments—publicly traded securities .	<u>.</u>		33,223,211	11	37,080,040
	12	Investments—other securities. See Part IV, li	ne 11			12	
	13	Investments—program-related. See Part IV, I		13			
	14	Intangible assets		14			
	15	Other assets. See Part IV, line 11			0	15	1,241,034
	16	Total assets: Add lines 1 through 15 (must e	qual lir	ne 33)	48,172,266	16	54,599,533
	17	Accounts payable and accrued expenses .	-		4,900,585	17	7,279,147
	18	Grants payable		18			
	19	Deferred revenue	3,188,144	19	4,342,142		
	20	Tax-exempt bond liabilities	🗖		20		
60	21	Escrow or custodial account liability. Complete Part IV of Schedule D				21	
e.	22			-			
abilities	22	Loans and other payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons				22	
<u> </u>	22	Secured mortgages and notes payable to unre			22		
	23	0 0 1 3		· · –		23	
	24	Unsecured notes and loans payable to unrela		-	10 100 277	24	11,681,826
	25	Other liabilities (including federal income tax parties, and other liabilities not included on I Complete Part X of Schedule D		10,199,377	25	11,001,020	
	26	Total liabilities. Add lines 17 through 25 .			18,288,106	26	23,303,115
es		Organizations that follow FASB ASC 958, che	ck here	► M and complete			
lanc	27	lines 27, 28, 32, and 33. Net assets without donor restrictions			29,884,160	27	31,296,418
Net Assets or Fund Balances	28	Net assets with donor restrictions		1		28	
ur		Organizations that do not follow FASB ASC 9	58, che	eck here 🕨 🔽 and			
or H	29	complete lines 29 through 33. Capital stock or trust principal, or current fun				29	
ets	30	Paid-in or capital surplus, or land, building or				30	
SS	31	Retained earnings, endowment, accumulated i	• •			31	
t A	32	Total net assets or fund balances			29,884,160	32	31,296,418
Ne	33	Total liabilities and net assets/fund balances			48,172,266	33	54,599,533
							1

Form	990 (2021)			I	Page <b>12</b>
Pai	t XI Reconcilliation of Net Assets				
	Check if Schedule O contains a response or note to any line in this Part XI				. 🔽
1	Total revenue (must equal Part VIII, column (A), line 12)	1			694,026
2	Total expenses (must equal Part IX, column (A), line 25)	2		34,9	995,470
3					98,556
4	Net assets or fund balances at beginning of year (must equal Part X, line 32, column (A))	4		29,8	384,160
5	Net unrealized gains (losses) on investments	5		1,2	255,637
6	Donated services and use of facilities	6			
7	Investment expenses	7			
8	Prior period adjustments	8			
9	Other changes in net assets or fund balances (explain in Schedule O)	9		- 5	541,935
10	Net assets or fund balances at end of year. Combine lines 3 through 9 (must equal Part X, line 32, column	10		31,2	296,418
Pa	rt XII Financial Statements and Reporting				
	Check if Schedule O contains a response or note to any line in this Part XII				
1	Accounting method used to prepare the Form 990: Cash Accrual Other If the organization changed its method of accounting from a prior year or checked "Other," explain on Schedule O.			Yes	No
2a	Were the organization's financial statements compiled or reviewed by an independent accountant?		2a		No
	If 'Yes,' check a box below to indicate whether the financial statements for the year were compiled or review a separate basis, consolidated basis, or both:	ed on			
	Separate basis Consolidated basis Both consolidated and separate basis				
b	Were the organization's financial statements audited by an independent accountant?		2b	Yes	
	If 'Yes,' check a box below to indicate whether the financial statements for the year were audited on a separ basis, consolidated basis, or both:	ate			
	Separate basis Consolidated basis Both consolidated and separate basis				
С	If "Yes," to line 2a or 2b, does the organization have a committee that assumes responsibility for oversight of the audit, review, or compilation of its financial statements and selection of an independent accountant?	t	2c	Yes	
	If the organization changed either its oversight process or selection process during the tax year, explain in Schedule O.				
3a	As a result of a federal award, was the organization required to undergo an audit or audits as set forth in the Single Audit Act and OMB Circular A-133?	<u>è</u>	3a		No
b	If "Yes," did the organization undergo the required audit or audits? If the organization did not undergo the required audit or audits, explain why in Schedule O and describe any steps taken to undergo such audits.		3b		

Form **990** (2021)

Form 990 (2021)

**Additional Data** 

Return to Form

Software ID:

Software Version:

Form 990, Special Condition Description:

Special Condition Description

SCHEDULE C	Political Campaign and Lobbying Activities	;	OMB No.	1545-0047
(Form 990)	20	21		
Department of the Treasury Internal Revenue Service	Complete if the organization is described below. Attach to Form 990 or Fo Go to <u>www.irs.gov/Form990</u> for instructions and the latest information			o Public ection
<ul> <li>Section 501(c)(3) or</li> <li>Section 501(c) (oth</li> <li>Section 527 organization are</li> <li>Section 501(c)(3) or</li> <li>Section 501(c)(3) or</li> <li>Section 501(c)(3) or</li> <li>If the organization are</li> <li>Ine 35c (Proxy Tax)</li> </ul>	Iswered "Yes" on Form 990, Part IV, Line 3, or Form 990-EZ, Part V, line 46 ( ganizations: Complete Parts I-A and B. Do not complete Part I-C. er than section 501(c)(3)) organizations: Complete Parts I-A and C below. Do not cor zations: Complete Part I-A only. Iswered "Yes" on Form 990, Part IV, Line 4, or Form 990-EZ, Part VI, line 47 rganizations that have filed Form 5768 (election under section 501(h)): Complete Part rganizations that have NOT filed Form 5768 (election under section 501(h)): Complete Iswered "Yes" on Form 990, Part IV, Line 5 (Proxy Tax) (see separate instructions), then (see separate instructions), then	nplete Part I-B. <b>(Lobbying Ac</b> t II-A. Do not cc e Part II-B. Do r	<b>tivities), th</b> omplete Part not complete	<b>en</b> II-B. Part II-A.
Name of the organization	5), or (6) organizations: Complete Part III.	mployer identi	fication nun	nber
AMERICAN GAS ASSOCIAT	ION			
Part L-A Comple	te if the organization is exempt under section 501(c) or is a se	3-0431590	organizat	ion
1 Provide a descri	ption of the organization's direct and indirect political campaign activities in Part litical campaign activities."			
	n activity expenditures. See instructions	🕨 📢		232,355
	for political campaign activities. See instructions			
Part I-B Comple	te if the organization is exempt under section 501(c)(3).			
1 Enter the amour	t of any excise tax incurred by the organization under section 4955	\$		
2 Enter the amour	t of any excise tax incurred by organization managers under section 4955	\$		
3 If the organizati	on incurred a section 4955 tax, did it file Form 4720 for this year?		T Yes	∏ No
4a Was a correction	n made?		T Yes	∏ No
b If "Yes," describ	e in Part IV.			
Part I-C Comple	te if the organization is exempt under section 501(c), except s			
1 Enter the amour	t directly expended by the filing organization for section 527 exempt function act	ivities \$		47,355
	t of the filing organization's funds contributed to other organizations for section 5 activities			185,000
3 Total exempt fu	nction expenditures. Add lines 1 and 2. Enter here and on Form 1120-POL, line 1	7b\$		232,355

4 Did the filing organization file Form 1120-POL for this year?

5 Enter the names, addresses and employer identification number (EIN) of all section 527 political organizations to which the filing organization made payments. For each organization listed, enter the amount paid from the filing organization's funds. Also enter the amount of political contributions received that were promptly and directly delivered to a separate political organization, such as a separate segregated fund or a political action committee (PAC). If additional space is needed, provide information in Part IV.

(a) Name	(b) Address	(C) E I N	(d) Amount paid from filing organization's funds. If none, enter -0	(e) Amount of political contributions received and promptly and directly delivered to a separate political organization. If none, enter -0
(1) AMERICAN GAS ASSOCIATION POLITICAL ACTION COMMITTEE	400 N CAPITOL STREET NW WASHINGTON, DC 20001	13-0431590	0	34,511
(2) COMMUNITY LEADERS OF AMERICA	PO BOX 2262 SPRINGFIELD, VA 22152	46-3149989	5,000	
(3) DAGA INC	PO BOX 34445 WASHINGTON, DC 20005	13-4220019	12,500	
(4) DEMOCRATIC GOVERNORS' ASSOCIATION	1225 I STREET NW WASHINGTON, DC 20005	52-1304889	62,500	
(5) DEMOCRATIC LEGISLATIVE CAMPAIGN COMMITTEE	1225 I STREET NW WASHINGTON, DC 20005	52-1870839	25,000	
(6) GOPAC	2300 CLARENDON ARLINGTON, V A 22201	52-1237780	15,000	
(7) REPUBLICAN ATTORNEYS GENERAL ASSOCIATION	1747 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20006	46-4501717	15,000	
(8) REPUBLICAN GOVERNORS ASSOCIATION	1747 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20006	52-1174414	20,000	
(9) REPUBLICAN STATE LEADERSHIP COMMITTEE	1201 F STREET NW WASHINGTON, DC 20004	05-0532524	30,000	

For Paperwork Reduction Act Notice, see the instructions for Form 990.

Ves

∏ No

Sch	edule C (Form 990) 2021			Page <b>2</b>
Pa	art II-A Complete if the organization under section 501(h)).	is exempt under section 501(c)(3) a	nd filed Form 5	768 (election
Α	Check $\mathbf{P}$ if the filing organization belongs to	an affiliated group (and list in Part IV each affilia	ated group member's	name, address, EIN,
	expenses, and share of excess lobb			
В	Check 🕨 🥅 if the filing organization checked b	ox A and "limited control" provisions apply.		
	Limits on Lobbyir (The term "expenditures" mear		<b>(a)</b> Filing organization's totals	(b) Affiliated group totals
1a	Total lobbying expenditures to influence public o	pinion (grass roots lobbying)		
b	Total lobbying expenditures to influence a legisla	ative body (direct lobbying)		
С	Total lobbying expenditures (add lines 1a and 1b	)		
d	Other exempt purpose expenditures			
е	Total exempt purpose expenditures (add lines 10	c and 1d)		
f	Lobbying nontaxable amount. Enter the amount f columns.	rom the following table in both		
	If the amount on line 1e, column (a) or (b) is:	The lobbying nontaxable amount is:		
	Not over \$500,000	20% of the amount on line 1e.		
	Over \$500,000 but not over \$1,000,000	\$100,000 plus 15% of the excess over \$500,000.		
	Over \$1,000,000 but not over \$1,500,000	\$175,000 plus 10% of the excess over \$1,000,000.		
	Over \$1,500,000 but not over \$17,000,000	\$225,000 plus 5% of the excess over \$1,500,000.		
	Over \$17,000,000	\$1,000,000.		
			r	T
g	Grassroots nontaxable amount (enter 25% of lin			
	Subtract line 1g from line 1a. If zero or less, ent			
1	Subtract line 1f from line 1c. If zero or less, ente			<u> </u>
J	If there is an amount other than zero on either li section 4911 tax for this year?	ne 1h or line 1i, did the organization file Form 47	1 0	Yes No

### 4-Year Averaging Period Under Section 501(h) (Some organizations that made a section 501(h) election do not have to complete all of the five columns below. See the separate instructions for lines 2a through 2f.)

	Lobbying Expenditu	res During 4	-Year Averag	ging Period					
	Calendar year (or fiscal year beginning in)	<b>(a)</b> 2018	<b>(b)</b> 2019	<b>(c)</b> 2020	<b>(d)</b> 2021	<b>(e)</b> Total			
2a	Lobbying nontaxable amount								
b	Lobbying ceiling amount (150% of line 2a, column(e))								
с	Total lobbying expenditures								
d	Grassroots nontaxable amount								
е	Grassroots ceiling amount (150% of line 2d, column (e))								
f	Grassroots lobbying expenditures					(Farm 000) 2021			

Schedule C (Form 990) 2021

Schedule C (Form 990) 2021

Page 3

For	filed Form 5768 (election under section 501(h)).	(8	(b)			
activ	each "Yes" response on lines 1a through 1i below, provide in Part IV a detailed description of the lobbying rity.	Vac		~		.+
		Yes		А	moun	n.
1	During the year, did the filing organization attempt to influence foreign, national, state or local legislation, including any attempt to influence public opinion on a legislative matter or referendum, through the use of:					
а	Volunteers?					
b	Paid staff or management (include compensation in expenses reported on lines 1c through 1i)?					
с	Media advertisements?					
d	Mailings to members, legislators, or the public?					
е	Publications, or published or broadcast statements?					
f	Grants to other organizations for lobbying purposes?					
g	Direct contact with legislators, their staffs, government officials, or a legislative body?					
h	Rallies, demonstrations, seminars, conventions, speeches, lectures, or any similar means?					
i	Other activities?					
j	Total. Add lines 1c through 1i					
2a	Did the activities in line 1 cause the organization to be not described in section 501(c)(3)?					
b	If "Yes," enter the amount of any tax incurred under section 4912					
с	If "Yes," enter the amount of any tax incurred by organization managers under section 4912					
d	If the filing organization incurred a section 4912 tax, did it file Form 4720 for this year?					
Par	t III-A Complete if the organization is exempt under section 501(c)(4), section 5	i01(c)	)(5), o	r		
	section 501(c)(6).			<u> </u>		
			<u> </u>	-	Yes	No
1	Were substantially all (90% or more) dues received nondeductible by members?			1		No
2	Did the organization make only in-house lobbying expenditures of \$2,000 or less?			2		Νo
3	Did the organization agree to carry over lobbying and political expenditures from the prior year?			3	Yes	
Par	t III-B Complete if the organization is exempt under section 501(c)(4), section 5501(c)(6) and if either (a) BOTH Part III-A, lines 1 and 2, are answered "line 3, is answered "Yes."	No" O			: 111-	-A,
1	Dues, assessments and similar amounts from members	1			28,5	579,11
2	Section 162(e) nondeductible lobbying and political expenditures (do not include amounts of political expenses for which the section 527(f) tax was paid).	2a			1 3	340,74
а	Current year					129,26
b	Carryover from last year	2b				211,48
с		2c				211,40
3	Aggregate amount reported in section 6033(e)(1)(A) notices of nondeductible section 162(e) dues .	3			1,0	180,00
4	If notices were sent and the amount on line 2c exceeds the amount on line 3, what portion of the excess does the organization agree to carryover to the reasonable estimate of nondeductible lobbying and					
	political expenditure next year?	4			1	125,47
5	Taxable amount of lobbying and political expenditures. See Instructions	5				
P	art IV Supplemental Information					

Part II-B Complete if the organization is exempt under section 501(c)(3) and has NOT

Provide the descriptions required for Part I-A, line 1; Part I-B, line 4; Part I-C, line 5; Part II-A (affiliated group list); Part II-A, lines 1 and 2 (see instructions), and Part II-B, line 1. Also, complete this part for any additional information.

Return Reference	Explanation
	AGA MAKES CONTRIBUTIONS TO POLITICAL ORGANIZATIONS AS DISCLOSED ON SCHEDULE C OF THIS RETURN AND FUNDS ADMINISTRATIVE ACTIVITIES FOR ITS SEPARATE SEGREGATED FUND. AGA'S POLITICAL ACTION COMMITTEE MAKES CONTRIBUTIONS PERMISSIBLE UNDER STATE AND FEDERAL ELECTION LAWS.

Schedule C (Form 990) 2021

Additional Data

Return to Form

Software ID: Software Version:

	SCHEDULE D (Form 990) Supplemental Financial Statements						OMB No. 1545-0047
(For	m 990)	Complete if the c	rganization answered "Yes," on Fo	rm 990,			2021
Dana	tment of the Treasury		, 10, 11a, 11b, 11c, 11d, 11e, 11f, 1 Attach to Form 990.				Open to Public
	al Revenue Service	► Go to <u>www.irs.gov/For</u>	<u>m990</u> for instructions and the late	st informa	ition.		Inspection
	me of the organiz ERICAN GAS ASSOCIA					<b>yer identif</b> 31590	fication number
Pa		izations Maintaining Donor A		ilar Fun			nts.
	Comple	te if the organization answered	"Yes" on Form 990, Part IV, lin (a) Donor advised funds	e 6.	(b)	) Funds ar	nd other accounts
1	Total number at	end of year			(5)		
2	Aggregate value	of contributions to (during year)					
3	Aggregate value	of grants from (during year)					
4	Aggregate value	at end of year					
5	0	ation inform all donors and donor adv n's property, subject to the organiza	8				re Yes 🔽 No
6	charitable purpo	ation inform all grantees, donors, and oses and not for the benefit of the do private benefit?	nor or donor advisor, or for any othe	er purpose	confer	ring	or
Ра		rvation Easements.	"Vac" on Form 000 Dart IV, lin	0.7			
1		te if the organization answered onservation easements held by the c		е 7.			
		n of land for public use (e.g., recreat		on of an hi	storica	Ily import	tant land area
	Protection of the second se	of natural habitat	Preservatio	on of a cer	tified h	nistoric st	ructure
	Preservatio	n of open space					
2		2a through 2d if the organization he last day of the tax year.	d a qualified conservation contribut	tion in the	for <u>m c</u>		rvation he End of the Year
а		f conservation easements		2	a	Tield at t	
b		estricted by conservation easements	5	2	!b		
с		ervation easements on a certified his	storic structure included in (a) .	:	2c		1
d	Number of cons	ervation easements included in (c) a re listed in the National Register	cquired after 7/25/06, and not on a		d		
3	Number of constax year	servation easements modified, transfo	erred, released, extinguished, or ter	rminated b	y the o	organizati	on during the
4	Number of state	es where property subject to conserv	vation easement is located 🕨				
5		ization have a written policy regardir enforcement of the conservation eas			g of		Yes 🔽 No
6	Staff and volun year	teer hours devoted to monitoring, ins	specting, handling of violations, and	l enforcing	conse	rvation ea	asements during the
7	Amount of expe	enses incurred in monitoring, inspect	ng, handling of violations, and enfo	orcing cons	servatio	on easem	ents during the year
8		servation easement reported on line on 170(h)(4)(B)(ii)?			n 170(		Yes 🔽 No
9	balance sheet,	escribe how the organization reports and include, if applicable, the text of	the footnote to the organization's				
Par	t III Organi	n's accounting for conservation ease izations Maintaining Collecti te if the organization answered	ons of Art, Historical Treas		Othe	er Simila	ar Assets.
1a	of art, historica	tion elected, as permitted under FAS Il treasures, or other similar assets h e, in Part XIII, the text of the footno	eld for public exhibition, education,	or resear	ch in fu	urtherance	
b	If the organizat art, historical ti	tion elected, as permitted under FAS reasures, or other similar assets held owing amounts relating to these item	B ASC 958, to report in its revenue for public exhibition, education, or	statemen	t and b	balance sh	
	(i) Revenue inclue	ded on Form 990, Part VIII, line 1 $\cdot$				▶\$	
(	-	d in Form 990, Part X · · · · · ·					
2	0	ion received or held works of art, his nts required to be reported under FA			nancia	l gain, pr	ovide the
а	Revenue includ	ed on Form 990, Part VIII, line 1 $\cdot$				▶\$	
b		d in Form 990, Part X				►\$ 	
For I	Paperwork Reduc	ction Act Notice, see the Instructions		Cat. No. 52283D		Sche	dule D (Form 990) 2021

Sch	dulo D (Form 000) 2021					Ryan, I
_	t III Organizations Maintaining (	Collections of A	Art Historical	Treasure	or Other Simi	Page 2
3	Using the organization's acquisition, acces collection items (check all that apply):					
а	Public exhibition		d 🔽 Loan	or exchan	ge programs	
b	Scholarly research		e 🔽 Othe	r		
с	Preservation for future generations					
4	Provide a description of the organization's	collections and over	lain how thoy furth	or the ora	anization's axomptin	irnoso in
4	Part XIII.		nam now they furth	ier the org		n pose m
5	During the year, did the organization solici assets to be sold to raise funds rather than					Yes No
Pa	t IV Escrow and Custodial Arran Complete if the organization an Part X, line 21.		Form 990, Part	IV, line 9	, or reported an a	mount on Form 990,
1a	Is the organization an agent, trustee, custo included on Form 990, Part X?		2			Yes No
b	If "Yes," explain the arrangement in Part X	(III and complete th	he following table:	Γ	Am	ount
c	Beginning balance		6	ľ	1c	<u> </u>
d	Additions during the year				1d	
е	Distributions during the year			i i	1e	
f	Ending balance				1f	
2a	Did the organization include an amount on	Form 990, Part X,	line 21, for escrow	or custod	ial account liability?	Yes No
b	··· If "Yes," explain the arrangement in Part ≯	(III. Check here if	the explanation has	s been pro	vided in Part XIII	
-	rt V Endowment Funds.					E
	Complete if the organization an					
		(a) Current year	(b) Prior year	(c) Two ye	ears back (d) Three year	s back (e) Four years back
	Beginning of year balance					
	Contributions					
L	Net investment earnings, gains, and losses					
d	Grants or scholarships					
е	Other expenditures for facilities					
	and programs					
	Administrative expenses					
	End of year balance					
2	Provide the estimated percentage of the cu Board designated or guasi-endowment	irrent year end bala	ance (line 1g, colun	nn (a)) nei	d as:	
a	Permanent endowment					
b	Term endowment					
с	The percentages on lines 2a, 2b, and 2c s	hould equal 100%				
3a	Are there endowment funds not in the poss organization by:			ld and adm	ninistered for the	Yes No
	(i) Unrelated organizations					3a(i)
	(ii) Related organizations					3a(ii)
b	If "Yes" on 3a(ii), are the related organiza	tions listed as requ	ired on Schedule R	?		3b
4	Describe in Part XIII the intended uses of	the organization's	endowment funds.			
Pa	t VI Land, Buildings, and Equipn	-				
	Complete if the organization an           Description of property         (a) Cost or oth (investme)	her basis (b) Cos	Form 990, Part st or other basis (other)		1a. See Form 990,           mulated depreciation	Part X, line 10. (d) Book value
1a	Land					
	Buildings					
с	Leasehold improvements		4,957,95	4	1,418,857	3,539,097
d	Equipment		2,228,12	8	977,692	1,250,436
е	Other		1,144,62	1	949,160	195,461

e Other

Total. Add lines 1a through 1e. (Column (d) must equal Form 990, Part X, column (B), line 10(c).)

۲

4,984,994

Schedule D (Form 990) 2021				Page <b>3</b>
Part VII Investments - Other Securities. Complete if the organization answered "Yes" on Form	990, Part	IV, line 11b.See	e Form 990	, Part X, line 12.
(a) Description of security or category (including name of security)	(b) Bo value	ok	(c) Method of	
(1) Financial derivatives				
(2) Closely-held equity interests	-			
(A)				
(B)				
(C)				
(D)				
(E)				
(F)				
(G)				
(H)				
Total. (Column (b) must equal Form 990, Part X, col. (B) line 12.)	•			
PartInvestments - Program Related.VIIIComplete if the organization answered 'Yes' on Form	990, Part	IV, line 11c. Se	e Form 990	), Part X, line 13.
(a) Description of investment		(b) Book value		lethod of valuation: nd-of-year market value
(1)				
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				
(8)				
(9)				
Total. (Column (b) must equal Form 990, Part X, col.(B) line 13.)	•			
Part IX Other Assets. Complete if the organization answered 'Yes' on Form 9	990, Part	IV, line 11d. See	Form 990, F	Part X, line 15.
(a) Description				(b) Book value
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				
(8)				
(9)				
Total. (Column (b) must equal Form 990, Part X, col. (B) line 15.)				<u> </u>
Part X Other Liabilities. Complete if the organization answered 'Yes' on Form 9 See Form 990, Part X, line 25.	 990, Part	IV, line 11e or 1	1f.	<u>-                                     </u>
1. (a) Description of liability				(b) Book value
(1) Federal income taxes (5)				
(6)				
(7)				
(8)				
(9)				
Total. (Column (b) must equal Form 990, Part X, col. (B) line 25.)			•	11,681,826
2. Liability for uncertain tax positions. In Part XIII, provide the text of the organization's liability for uncertain tax positions under FIN 48 (ASC 740). XIII				
			Sc	chedule D (Form 990) 2021

Sche	dule D (Form 990) 2021				Page <b>4</b>
Ра	rt XI Reconciliation of Revenue per Audited Financial Sta Return. Complete if the organization answered 'Yes' on Form 990,			per	
1	Total revenue, gains, and other support per audited financial statements			1	37,623,996
2	Amounts included on line 1 but not on Form 990, Part VIII, line 12:				
а	Net unrealized gains (losses) on investments	2a	1,255,637		
b	Donated services and use of facilities	2b			
с	Recoveries of prior year grants	2c			
d	Other (Describe in Part XIII.)	2d	705,690		
			•		
е	Add lines <b>2a</b> through <b>2d</b>			2e	1,961,327
3	Subtract line 2e from line 1			3	35,662,669
4	Amounts included on Form 990, Part VIII, line 12, but not on line ${\bf 1}:$				
а	Investment expenses not included on Form 990, Part VIII, line 7b .	4a	31,357		
b	Other (Describe in Part XIII.)	4b			
с	Add lines <b>4a</b> and <b>4b</b>			4c	31,357
5	Total revenue. Add lines 3 and 4c. (This must equal Form 990, Part I, line	12.)		5	35,694,026
Par	t XII Reconciliation of Expenses per Audited Financial St Complete if the organization answered 'Yes' on Form 990,			s per	Return.
1	Total expenses and losses per audited financial statements			1	36,074,237
2	Amounts included on line 1 but not on Form 990, Part IX, line 25:				
а	Donated services and use of facilities	2a			
b	Prior year adjustments	2b			
с	Other losses	2c			
d	Other (Describe in Part XIII.)	2d	159,266	1	
е	Add lines 2a through 2d			2e	159,266
3	Subtract line 2e from line 1			3	35,914,971
4	Amounts included on Form 990, Part IX, line 25, but not on line 1:				
а	Investment expenses not included on Form 990, Part VIII, line 7b	4a	31,357		
b	Other (Describe in Part XIII.)	4b	-950,858		
с	Add lines <b>4a</b> and <b>4b</b>			4c	-919,501
5	Total expenses. Add lines 3 and 4c. (This must equal Form 990, Part I, line	e 18.)		5	34,995,470
				-	-

### Part XIII

### Supplemental Information

Provide the descriptions required for Part II, lines 3, 5, and 9; Part III, lines 1a and 4; Part IV, lines 1b and 2b; Part V, line 4; Part X, line 2; Part XI, lines 2d and 4b; and Part XII, lines 2d and 4b. Also complete this part to provide any additional information.

Return Reference	Explanation
	FAS 158 ADJUSTMENT 541,935. PAC CONTRIBUTIONS 161,761. NET LOSS ON ASSET DISPOSAL 1,994.
PART XII, LINE 2D - OTHER ADJUSTMENTS:	NET LOSS ON ASSET DISPOSAL 1,994. PAC EXPENSES 157,272.
PART XII, LINE 4B - OTHER ADJUSTMENTS:	NET PERIODIC BENEFITS COST -950,858.

Schedule D (Form 990) 2021

**Additional Data** 

Return to Form

Software ID: Software Version:

SCHEDULE F	Sta	atement of	Activities	Outside the Un	ited States	OMB No. 1545-0047
(Form 990)		lete if the organi	2021			
Department of the Treasury	,	Go to www.irs.g		to Form 990. instructions and the latest	information.	Open to Public Inspection
Internal Revenue Service						
Name of the organization						identification number
Part I General	Informatio	on on Activit	tios Outsido	the United States.	13-04315	
		Part IV, line 14		the onited States.	complete il the org	
		-		rds to substantiate the	-	
	-		-	or assistance, and the		
to award the gr	ants or assis	stance?				· Ves No
2 For grantmake assistance outs			organization's	procedures for monito	pring the use of its (	grants and other
3 Activites per Reg	ion. (The follo	wing Part I, line	e 3 table can be	duplicated if additional s	pace is needed.)	
<b>(a)</b> Region		(b) Number of offices in the region	(c) Number of employees, agents, and independent contractors in the		(e) If activity listed in (d program service, descr , specific type of service(s) in the regio	ibe for and investments in the region
(1) EUROPE (INCLUI		0	region 0	region) PROGRAM SERVICES	INTERNATIONAL G	AS 22,386
	(2) EUROPE (INCLUDING		0	SPONSORSHIP	UNION DUES SPONSOR 2021 LN	G 25,000
ICELAND & GREE ALBANIA, ANDO AUSTRIA, BELGI	ENLAND) - RRA,				REPORT	
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
( 						
( 11)						
( 12)						
( 13)						
( 14)						
(						
15) (						
<u>16)</u> (						
<u>17)</u>		-				17.00/
<ul> <li>3a Sub-total</li> <li>b Total from continutor</li> <li>to Part I</li> </ul>		0	(			47,386
c Totals (add lines 3	3 <u>a and</u> 3b)	0	(			0 47,386

For Paperwork Reduction Act Notice, see the Instructions for Form 990.

Schedule F (Form 99	0) 2021							Page 2
			anizations or Entit aceived more than \$5					" on Form 990,
1 (a) Name of organization	(b) IRS code section and EIN (if applicable)	(c) Region	(d) Purpose of grant	(e) Amount of cash grant	<b>(f)</b> Manner of cash disbursement	<b>(g)</b> Amount of noncash assistance	<b>(h)</b> Description of noncash assistance	(i) Method of valuation (book, FMV, appraisal, other)
(1)		EUROPE	SPONSOR-LNG REPORT 2021	25,000		C		
(2)								
(3)								
(4)								
(5)								
(6)								
(7)								
(8)								
(9)								
( 10)								
( 11)								
( 12)								
( 13)								
( 14)								
( 15)								
( 16)								
			sted above that are re-				S	0
	B Enter total number of other organizations or entities							

Schedule F (Form 990) 2021

Schedule F (Form 990) 2021 Page <b>3</b>							
Part III Grants and Other Assistance to Individuals Outside the United States. Complete if the organization answered "Yes" on Form 990, Part IV, line 16. Part III can be duplicated if additional space is needed.							
(a) Type of grant or assistance	(b) Region	(c) Number of recipients	(d) Amount of cash grant	(e) Manner of cash disbursement	(f) Amount of noncash assistance	<b>(g)</b> Description of noncash assistance	(h) Method of valuation (book, FMV, appraisal, other)
(1)							
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
( 10)							
( 11)							
( 12)							
( 13)							
( 14)							
( 15)							
( 16)							
( 17)							
( 18)							

Schedule F (Form 990) 2021

Sche	edule F (Form 990) 2021		Page 4
Par	rt IV Foreign Forms		
1	Was the organization a U.S. transferor of property to a foreign corporation during the tax year? If "Yes," the organization may be required to file Form 926, Return by a U.S. Transferor of Property to a Foreign Corporation (see Instructions for Form 926)	Yes	V o
2	Did the organization have an interest in a foreign trust during the tax year? If "Yes," the organization may be required to separately file Form 3520, Annual Return to Report Transactions with Foreign Trusts and Receipt of Certain Foreign Gifts, and/or Form 3520-A, Annual Information Return of Foreign Trust With a U.S. Owner (see Instructions for Forms 3520 and 3520-A; don't file with Form 990)	Yes	V o
3	Did the organization have an ownership interest in a foreign corporation during the tax year? If "Yes," the organization may be required to file Form 5471, Information Return of U.S. Persons with Respect to Certain Foreign Corporations. (see Instructions for Form 5471)	Yes	V o
4	Was the organization a direct or indirect shareholder of a passive foreign investment company or a qualified electing fund during the tax year? If "Yes," the organization may be required to file Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund. (see Instructions for Form 8621).	Yes	V o
5	Did the organization have an ownership interest in a foreign partnership during the tax year? If "Yes," the organization may be required to file Form 8865, Return of U.S. Persons with Respect to Certain Foreign Partnerships (see Instructions for Form 8865)	Yes	N o
6	Did the organization have any operations in or related to any boycotting countries during the tax year? If "Yes," the organization may be required to separately file Form 5713, International Boycott Report (see Instructions for Form 5713; don't file with Form 990).	Yes	V o

Schedule F (Form 990) 2021

Schedule F (Form 990) 2021	Page 5
method; amounts of inves (accounting method); and	tion equired by Part I, line 2 (monitoring of funds); Part I, line 3, column (f) (accounting stments vs. expenditures per region); Part II, line 1 (accounting method); Part III I Part III, column (c) (estimated number of recipients), as applicable. Also complete dditional information. See instructions.
ReturnReference	Explanation
PART I, LINE 2:	CONTRIBUTIONS RELATED TO INDUSTRY RESEARCH PAPERS AND COMMUNICATIONS MAY INVOLVE THE RESPECTIVE AGA STAFF IN THE DEVELOPMENT, REVIEW, AND EXECUTION OF ANY DELIVERABLE.
PART III ACCOUNTING METHOD:	
	Schodula E (Earm 000) 2021

Schedule F (Form 990) 2021

**Additional Data** 

Software ID: Software Version:

Note: To capture the full Schedule I (Form 990) Department of the		Grants and Governments Complete if the organiz	Other Assistant and Individuals zation answered "Yes," o Attach to Form	ce to Organiza s in the United on Form 990, Part IV, 990.	ations, d States line 21 or 22.		OMB No. 1545-0047 2021 Open to Public Inspection
Treasury Internal Revenue Service Name of the organization		Go to <u>ww</u>	<u>w.irs.gov/Form990</u> for	the latest information	on.	Employe	r identification number
AMERICAN GAS ASSOCIATIO	DN .					13-043	
Part I General Inform	nation on Grar	nts and Assistance	9				
<ol> <li>Does the organization main the selection criteria used</li> <li>Describe in Part IV the organization</li> </ol>	to award the gra ganization's proce	nts or assistance? dures for monitoring th	e use of grant funds in t	he United States.			Ves 🕅 N
Part II Grants and Other As that received more			Domestic Governments. additional space is need		nization answered "Yes" (	on Form 990, Part	IV, line 21, for any recipient
(a) Name and address of organization or government	<b>(b)</b> EIN	<b>(c)</b> IRC section (if applicable)	<b>(d)</b> Amount of cash grant	(e) Amount of non- cash assistance	(f) Method of valuation (book, FMV, appraisal, other)	<b>(g)</b> Description noncash assis	
(1) AFRICAN AMERICAN MAYORS ASSOCIATION INC 80 M STREET SE SUITE 1 WASHINGTON, DC 20003	46-5593933	501C3	15,000	0			SPONSORSHIP
(2) AMERICAN ASSOCIATION OF BLACKS IN ENERGY 927 15TH STREET NW SUITE 200 WASHINGTON, DC 20005	84-0782569	501C3	10,000	0			SPONSORSHIP
(3) AMERICAN GAS FOUNDATION 400 N CAPITOL ST NW SUITE 450 WASHINGTON, DC 20001	54-1501306	501C3	10,000	0			SUPPORT
(4) AMERICAN NATIONAL STANDARDS INSTITUTE 25 WEST 43RD STREET 4TH FLOOR NEW YORK CITY, N Y 10036	13-1635253	501C3	6,115	0			SPONSORSHIP
(5) AMERICAN PETROLEUM INSTITUTE 200 MASSACHUSETTS AVE NW WASHINGTON, DC 20001	13-0433430	501C6	10,000	0			SPONSORSHIP
(6) ASSOCIATION OF HOME APPLIANCE MANUFACTURERS 1111 19TH STREET SUITE 402 WASHINGTON, DC 20036	36-2615812	501C6	50,000	0			SPONSORSHIP
(7) BOY SCOUTS OF AMERICA 9190 ROCKVILLE PIKE BETHESDA, MD 20814	53-0204610	501C3	15,000	0			SPONSORSHIP
(8) BRYCE HARLOW FOUNDATION 1701 PENNSYLVANIA AVE NW SUITE 400 WASHINGTON, DC 20006	52-1266620	501C3	7,500	0			SPONSORSHIP
(9) BUSINESS COUNCIL FOR SUSTAINABLE ENERGY 805 15TH ST NW WASHINGTON, DC 20005	52-1801630	501C6	10,000	0			SPONSORSHIP
(10) CENTER FOR ENERGY WORKFORCE DEVELOPMENT 701 PENNSYLVANIA AVE NW WASHINGTON, DC 20004	20-4504014	501C3	22,500	0			SUPPORT
(11) COLORADANS FOR ENERGY ACCESS 7900 E UNION AVE SUITE 1100 DENVER, C O 80207	86-1971581	501C4	50,000	0			SUPPORT
(12) CONGRESSIONAL HISPANIC CAUCUS INSTITUTE INC 1128 16TH STREET NW	52-1114225	501C3	15,000	0			SPONSORSHIP

### Environmental Intervenors/312 Ryan/30

WASHINGTON, DC 20036		1	1		I	-
(13) CRES FORUM 1201 PENNSYLVANIA AVENUE NW SUITE	46-0558330	5 O 1 C 4	10,000	0		SPONSORSHIP
220 WASHINGTON, DC 20004						
(14) CSA GROUP 8501 EAST PLEASANT VALLEY ROAD INDEPENDENCE, O H 44131	98-0120704	501C6	10,000	0		SPONSORSHIP
(15) CSG 1776 AVENUE OF THE STATES LEXINGTON,KY 40511	36-6000818	501C3	22,450	0		SPONSORSHIP
(16) DEMOCRATIC GOVERNORS' ASSOCIATION 1225 I STREET NW SUITE 1100 WASHINGTON, DC 20005	52-1304889	527	37,500	0		SUPPORT
(17) EDISON ELECTRIC INSTITUTE 701 PENNSYLVANIA AVE NW WASHINGTON, DC 20004	13-0659550	501C6	25,000	0		SUPPORT
(18) INDEPENDENT PETROLEUM ASSOC OF AMERICA 1201 15TH STREET NW SUITE 300 WASHINGTON, DC 20005	73-0296927	501C6	26,250	0		SUPPORT
(19) INTERNATIONAL CODE COUNCIL INC 4051 W FLOSSMOOR ROAD COUNTRY CLUB HILLS, IL 60478	36-3999004	501C6	34,500	0		SPONSORSHIP
(20) NARUC 1101 VERMONT AVE NW STE 200 WASHINGTON, DC 20005	53-0204609	5 O 1 C 4	26,000	0		SPONSORSHIP
(21) NASUCA 8380 COLESVILLE ROAD SUITE 101 SILVER SPRING, MD 20910	59-1986067	5 0 1 C 4	10,000	0		SPONSORSHIP
(22) NATIONAL ASSOCIATION OF COUNTIES PO BOX 38059 BETHESDA, MD 212978057	53-0190321	5 0 1 C 4	25,000	0		SPONSORSHIP
(23) NATIONAL ENERGY AND UTILITY AFFORDABILITY COALITION 1850 M STREET NW STE 610 WASHINGTON, DC 20036	52-1559709	501C3	36,000	0		SUPPORT
(24) NATIONAL GOVERNORS ASSOCIATION 444 N CAPITOL ST NW SUITE 267 WASHINGTON, DC 20001	23-7391796	501C3	15,000	0		SUPPORT
(25) NCSL FOUNDATION FOR STATE LEGISLATURES 7700 EAST FIRST PLACE DENVER,CO 80230	74-2232576	5 0 1 C 3	12,500	0		SPONSORSHIP
(26) NEUAC 1850 M STREET NW STE 610 WASHINGTON, DC 20036	52-1559709	5 0 1 C 3	10,000	0		SPONSORSHIP
(27) PARTNERS FOR RESPONSIBLE ENERGY PROGRESS 1414 CHERRY STREET SE OLYMPIA, WA 98501	84-3818906	5 0 1 C 4	75,000	0		SUPPORT
(28) THE ECONOMIC CLUB OF WASHINGTON DC 1156 15TH STREET STE 601 WASHINGTON DC 20006	52-1469926	501C3	6,250	0		SPONSORSHIP
WASHINGTON, DC 20006 (29) THE WATERFALL FOUNDATION PO BOX 70049	54-1980898	501C3	6,500	0		SUPPORT

FAIRBANKS, AK 99707								
(30) WESTERN GOVERNORS' ASSOCIATION 1600 BROADWAY SUITE 1700 DENVER,C 0 80202		84-0747227	115	15,000	0			SPONSORSHIP
2	2 Enter total number of section 501(c)(3) and government organizations listed in the line 1 table							16
· · · · · · · · · · · · · · · · · · ·								
3	Enter total number of othe	er organizations lis	ted in the line 1 table .				<b>&gt;</b>	14
For F	aperwork Reduction Act Notic	ce, see the Instruct	ions for Form 990.		Cat. No. 5005	5P	Sch	edule I (Form 990) 2021

Schedule I (Form 990) 2021 Page **2** Part III Grants and Other Assistance to Domestic Individuals. Complete if the organization answered "Yes" on Form 990, Part IV, line 22. Part III can be duplicated if additional space is needed (b) Number of (c) Amount of (d) Amount of (e) Method of valuation (f) Description of noncash assistance (a) Type of grant or assistance recipients cash grant noncash assistance (book FMV, appraisal, other) (1) (2) (3) (4) (5) (6) (7) Supplemental Information. Provide the information required in Part I, line 2; Part III, column (b); and any other additional information. Part IV PART I, LINE 2: ASSISTANCE PAYMENTS RELATED TO CONFERENCES ARE MONITORED AND CONFIRMED BY DESIGNATED AGA STAFF, E.G., BY ATTENDING THE EVENT WHERE THE RECEIPT OF ANY BENEFITS IS TRANSPARENT INCLUDING THINGS LIKE DIGITAL BRANDING, EXHIBIT BOOTH PRESENCE AND SPEAKER PRESENTATIONS. ASSISTANCE RELATED TO INDUSTRY RESEARCH PAPERS AND COMMUNICATIONS MAY INVOLVE THE RESPECTIVE AGA STAFF IN THE DEVELOPMENT, REVIEW, AND EXECUTION OF ANY DELIVERABLE. FOR ASSISTANCE THAT IS MEMBERSHIP IN NATURE THROUGH RECEIPT OF MEMBERSHIP BENEFITS, AGA STAFF HAVE ACTIVE PARTICIPATION IN CONVENING BODIES SUCH AS COMMITTEES AND COUNCILS. LASTLY, ASSISTANCE RELATED TO CHARITABLE EFFORTS USUALLY HAVE PROGRESS REPORTS AND NEWSLETTERS THAT HIGHLIGHT THEIR ACCOMPLISHMENTS OR ALLOW AGA STAFF TO PARTICIPATE IN THEIR CHARITABLE ACTIVITIES AND EVENTS DURING THE YEAR

Schedule I (Form 990) 2021

Additional Data

Software ID: Software Version: Return to Form

Environmental Intervenors/312 Ryan/34

Sch	edule J	Comp	ensa	tion Information		OMB No.	1545-	0047
	n 990) ment of the Treasury	Complete if the organizat	ompen ion ans Attac	Trustees, Key Employees, and High sated Employees wered "Yes" on Form 990, Part IV, th to Form 990. or instructions and the latest inform	line 23.	<b>20</b> Open 1		
Interna	l Revenue Service				Employer identif	Insp	ectio	
	RICAN GAS ASSOCIA				13-0431590	ication nui		
Pa	rt I Questi	ons Regarding Compensation			13-0431590			
1a	990, Part VII, S First-class Travel for Tax idemn	opiate box(es) if the organization prov Section A, line 1a. Complete Part III t or charter travel companions ification and gross-up payments		de any relevant information regard Housing allowance or residence fo Payments for business use of pers Health or social club dues or initia	ing these items. r personal use sonal residence tion fees		Yes	No
b	If any of the bo reimbursement	ary spending account xes on Line 1a are checked, did the or or provision of all of the expenses de			g payment or	1b	Yes	
2	•	ation require substantiation prior to re ees, officers, including the CEO/Exect				2	Yes	
3	organization's (	if any, of the following the filing organ CEO/Executive Director. Check all tha ed organization to establish compensi	t apply	. Do not check any boxes for metho	ods			
	Independe	tion committee nt compensation consultant of other organizations	<u>&gt;</u> >	Written employment contract Compensation survey or study Approval by the board or compens	ation committee			
4		r, did any person listed on Form 990, a related organization:	Part VI	I, Section A, line 1a, with respect to	the filing			
a b c	Participate in, c Participate in, c	rance payment or change-of-control p or receive payment from, a supplemen or receive payment from, an equity-ba of lines 4a-c, list the persons and pro	tal non ised co	qualified retirement plan? mpensation arrangement?	in Part III.	4a 4b 4c	Yes	N o N o
5	For persons list	501(c)(4), and 501(c)(29) organizat ed on Form 990, Part VII, Section A, ontingent on the revenues of:			e any			
a b	Any related org	n?				5a 5b		
6		ed on Form 990, Part VII, Section A, ontingent on the net earnings of:	line 1a	, did the organization pay or accrue	e any			
a b	Any related org	n?				6a 6b		
7		ed on Form 990, Part VII, Section A, lescribed in lines 5 and 6? If "Yes," d				7		
8	subject to the i	nts reported on Form 990, Part VII, p nitial contract exception described in	Regula	ations section 53.4958-4(a)(3)? If	"Yes," describe	8		
9		8, did the organization also follow the 8-6(c)? .				9		

Schedule J (Form 990) 2021								Page <b>2</b>
Part II Officers, Directors, Trustees, Key Employee		-	-				-	eded.
For each individual whose compensation must be reported on Schedule instructions, on row (ii). Do not list any individuals that are not listed				ation on row (i) ar	nd from related or	ganizations, des	scribed in the	_
<b>Note.</b> The sum of columns (B)(i)-(iii) for each listed individual must each listed in				√II, Section A, line	<u>∍ 1a, applicable co'</u>	lumn (D) and (E	<u>) amounts for</u>	that individual.
(A) Name and Title			of W-2, 1099-MIS and/or 1099-NEC	ic .	and other	(D) Nontaxable	(E) Total of columns	(F) Compensation in
		(i) Base compensation	on Bonus & reportable co incentive compensation compensation		deferred compensation	benefits	(B)(i)-(D)	column (B) reported as deferred on prior Form 990
1KAREN HARBERT PRESIDENT & CEO	(i)	1,373,969	1,105,000	1,072	337,565	38,166	2,855,772	0
PRESIDENT & CEO	(ii)							
		0	0	0	0	0	0	0
2LORI TRAWEEK CHIEF OPERATING OFFICER	(i)	474,720	283,250	88,899	235,103	28,164	1,110,136	0
	(ii)	0						
3KEVIN HARDARDT	-	0 141,619	0 222,600	0 572,347	0 136,868	0 21,776	0	0
CHIEF FINANCIAL & ADM OFF (TO 6/21)	(i)							
	(ii)	0	0	0	0	0	0	0
4CHRISTINA SAMES	(i)	365,677	108,150	29,323	142,345	36,062	681,557	0
SVP, O&E								
	(ii)	0	0	0	0	0	0	0
5MIKE MURRAY GENERAL COUNSEL	(i)	340,796	120,209	27,666	37,700	36,504	562,875	0
	(ii)							
1010V 0400NED		0	0	0	0	0	0	0
6GARY GARDNER VICE PRESIDENT & CORP SEC (TO 12/21)	(i)	266,065	137,959	36,503	84,800	27,856	553,183	0
	(ii)	0						
7GEORGE LOWE	(i)	340,423	0 88,816	0 18,695	0 81,900	0 2,713	0 532,547	0
VP, GOVERNMENT RELATIONS								
	(ii)	0	0	0	0	0	0	0
8JENNIFER O'SHEA	(i)	223,209	61,466	2,972	56,900	38,166	382,713	0
VICE PRESIDENT, COMMUNICATIONS								
	(ii)	0	0	0	0	0	0	0
9MEGAN DUNN VICE PRESIDENT, TALENT OPERATIONS	(i)	216,970	61,800	493	22,654	39,071	340,988	0
	(ii)							
	_	U	0	0	0	0	0	0
10SUE FORRESTER VICE PRESIDENT, ADVOCACY & OUTREACH	(i)	226,244	60,513	393	19,575	14,397	321,122	0
1	(ii)							
11TERRI OLIVA	(i)	157,838	0 20,000	0	0 4,000	0 12,316	0 194,154	0
CHIEF FINANCIAL OFFICER (FROM 8/21)								
l de la constante d	(ii)	0	0	0	0	0	0	0
	1		1	1 '	· · · ·	['		
ı ————	<u> </u>	<b></b>	ļ'	ļ'	<b>↓</b> '	<b> </b> '	<b></b>	<b></b>
1		1	1	'	'	1	1	1
ı ————	'	<u> </u>	·'	·'	·'	t'	+	1
1		1	1	'	'	1	1	1
1				1 '	,	1		
I	<u> </u>	<u> </u>	<u> </u> '	<u>                                     </u>	<u>      '</u>	Ļ'	<u> </u>	<u> </u>
I		1	1	'	1 '	1	1	1
I	<u> </u>	<u> </u>	·	<u> </u>	<u>ا</u>	<u>'</u>	L	4

Schedule J (Form 990) 2021

Schedule J (Form 990) 2021	Page <b>3</b>									
Part III Supplemental Information										
Provide the information, explanation,	Provide the information, explanation, or descriptions required for Part I, lines 1a, 1b, 3, 4a, 4b, 4c, 5a, 5b, 6a, 6b, 7, and 8, and for Part II. Also complete this part for any additional information.									
Return Reference	Explanation									
	FIRST CLASS TRAVEL - AGA'S CHAIR IS AUTHORIZED FOR FIRST CLASS TRAVEL. THE CHAIR SERVES ON A VOLUNTARY BASIS AND CONTRIBUTES A SIGNIFICANT AMOUNT OF TIME TRAVELING IN CARRYING OUT THOSE DUTIES. AGA'S PRESIDENT & CEO IS AUTHORIZED FOR BUSINESS CLASS TRAVEL ON FLIGHTS SCHEDULED FOR MORE THAN 2-1/2 HOURS. IF BUSINESS CLASS TRAVEL IS NOT AVAILABLE FOR A SPECIFIC FLIGHT SEGMENT, FIRST CLASS TRAVEL MAY BE CONSIDERED. THEREFORE, IT IS REASONABLE THAT IN LIMITED CIRCUMSTANCES FIRST CLASS TRAVEL FOR THE AGA'S CHAIR AND PRESIDENT & CEO IS APPROVED ACCORDING TO AGA'S TRAVEL POLICY.									
	457(F) PLAN: KAREN HARBERT, CONTRIBUTIONS OF \$314,365 LORI TRAWEEK, CONTRIBUTIONS OF \$200,303 KEVIN HARDARDT, CONTRIBUTIONS OF \$102,068, PAYMENT OF \$527,727 GARY GARDNER, CONTRIBUTIONS OF \$50,000 CHRISTINA SAMES, CONTRIBUTIONS OF \$104,645 GEORGE LOWE, CONTRIBUTIONS OF \$50,000 JENNIFER O'SHEA, CONTRIBUTIONS OF \$25,000 KEVIN HARDARDT AND LORI TRAWEEK PARTICIPATE IN A NONQUALIFIED BENEFIT RESTORATION PLAN AND IN A NONQUALIFIED EXCESS PLAN.									

Schedule J (Form 990) 2021

Additional Data

Software ID: Software Version: Return to Form

SCHEDUL Form 990) repartment of the Traternal Revenue Se	reasury rvice	Go to <u>www.irs.gov/Form</u>	for responses to specifi ovide any additional inf orm 990 or 990-EZ.	ic questions on formation. prmation.	OMB No. 1545-004 2021 Open to Public Inspection
ame of the or MERICAN GAS AS					tification number
Return			Explanation	13-0431590	
Reference					
FORM 990, PART VI, SECTION A, LINE 1A	EXECU POWEF GENEF	SOCIATION'S BYLAWS, UNDER ARTICLE VII, SI TIVE COMMITTEE. THE EXECUTIVE COMMITTEE IS OF THE BOARD DURING THE INTERVALS BE ALLY COMPRISED OF THE BOARD OFFICERS / IRS ARE EXECUTIVES OF AGA FULL MEMBERS	IS ELECTED BY THE EN WEEN MEETINGS OF T AND NOT LESS THAN 7	ITIRE BOARD AND MAY EXI HE BOARD. THE EXECUTIV	ERCISE CERTAIN /E COMMITTEE IS
FORM 990, PART VI, SECTION A, LINE 6	STATE:	SOCIATION HAS FIVE CLASSES OF MEMBERS S GAS DISTRIBUTION PUBLIC AND MUNICIPAL U IATIONAL MEMBERS AND INTERNATIONAL AFFI ICATIONAL OPPORTUNITIES AND PARTICIPATE	JTILITIES AND HAVE VO LIATES CAN PARTICIPA	TING RIGHTS. LIMITED ME TE ON CERTAIN COMMITT	MBERS, ASSOCIATES,
FORM 990, PART VI, SECTION A, LINE 7A		SOCIATION IS A MEMBERSHIP ORGANIZATION ECTORS (THE ASSOCIATION'S PRINCIPAL GOV			
FORM 990, PART VI, SECTION A, LINE 7B	BODY ( THE AS ASSOCI ELECTI COMPE FINANCI VICE C	MBERS OF THE ASSOCIATION MAKE CERTAIN BOARD OF DIRECTORS) AS OUTLINED IN THE SOCIATION. SPECIAL MEETINGS MAY BE CALL IATION'S GOVERNING BODIES ARE ACTIVE IN J NG A BOARD OF DIRECTORS (BOD) FROM THE INSATION AND GOVERNANCE ARE ESTABLISHI E COMMITTEE, BOARD AUDIT COMMITTEE AND HAIR, AND OTHER BOD MEMBERS USUALLY IN TTEE CHAIR IS A MEMBER OF THE BOD AND PR	ORGANIZATION'S BYLA ED BY THE MEMBERSH A NUMBER OF WAYS. IN MEMBERSHIP, COMMIT DE BY THE BOD. THESE D BOARD COMPENSATIO CONJUNCTION WITH O	AWS AT THE ANNUAL OR S IIP TO ADDRESS ANY IMPO 4 ADDITION TO THE ASSOO TEES RELATED TO FINANO INCLUDE THE EXECUTIVE ON COMMITTEE (BOD CHA FFICERS FROM THE ASSO	SPECIAL MEETINGS OF RTANT MATTERS. THE CIATION MEMBERS CIAL OVERSIGHT, COMMITTEE, BOARD JR, VICE CHAIR, 2ND DCIATION). THE AUDIT
FORM 990, PART VI, SECTION B, LINE 11B	RETUR CONTR A DRAF FINANC ALL CC FORM COMM	SOCIATION'S INTERNAL PROCESS FOR REVIE N, THE ASSOCIATION HAS HIRED ITS OUTSIDE OLLER ACCUMULATES THE DATA AND FORW/ T OF THE FORM 990 IS THEN REVIEWED BY TH IAL OFFICER, CONTROLLER, GENERAL COUNS MMENTS AND FORWARDS TO THE OUTSIDE A 990. THE FINAL DRAFT IS PROVIDED TO THE AL TTEE ALONG WITH THE ACCOUNTING FIRM PA 20MWITTEE CHAIR REPORTS ON THIS REVIEW ECTORS BEFORE IT IS FILED.	ACCOUNTING FIRM TO ARDS TO THE OUTSIDE, E ASSOCIATION'S OFFIC SEL AND VP, TALENT OF CCOUNTING FIRM TO BI IDIT COMMITTEE. THE C RTNER WHO IS AVAILAN	PREPARE THE FORM 990. ACCOUNTING FIRM WHO CERS INCLUDING THE PRE PERATIONS. THE CONTRO E INCORPORATED IN THE CONTROLLER REVIEWS TH BLE FOR ANY QUESTIONS	THE ASSOCIATION'S DRAFTS THE FORM 990 (SIDENT & CEO, CHIEF LLER ACCUMULATES FINAL DRAFT OF THE HE 990 WITH THE AUDIT ON THE RETURN. THE
FORM 990, PART VI, SECTION B, LINE 12C	INTERE ANY AC STATE PRESIE REVIE REPOR EMPLC OFFICE	GANIZATION HAS NEW EMPLOYEES REVIEW A ST POLICY AT THE TIME OF HIRING, ALL EMPLO CTUAL OR POTENTIAL CONFLICT OF INTEREST VIENT OF COMPLIANCE. NEW BOARD MEMBERS VIENT & CEO, CHIEF FINANCIAL OFFICER, GENER VED AND DECLARE ANY POTENTIAL CONFLICT. T ANY ACTUAL OR POTENTIAL CONFLICT. THE YEES AND OTHERS ARE REVIEWED BY THE AS R AND VICE PRESIDENT, TALENT OPERATIONS COMMITTEE.	DYEES AND BOARD MEI TIN ACCORDANCE WITH S ATTEND A BOARD ORI RAL COUNSEL AND OTH ALL COUNSEL AND OTH OF INTEREST. ALL BO/ POTENTIAL CONFLICTS SSOCIATION'S PRESIDE	MBERS HAVE A CONTINUI H THE POLICY AND ANNU IENTATION SESSION WITH IERS WHERE THE ASSOCI ARD MEMBERS HAVE A CC S FOR BOARD MEMBERS, NT & CEO, GENERAL COU	NG DUTY TO REPORT ALLY SIGN A THE ORGANIZATION'S ATION'S POLICIES ARE DNTINUING DUTY TO OFFICERS, NSEL, CHIEF FINANCIA
FORM 990, PART VI, SECTION B, LINE 15	INDEPE COMMI RECON CEOS DELIBE MINUTE EMPLCI PRESIL DESCR EVALU CONTE NOVEN COMPE COMPE OFFICE	HE PRESIDENT & CEO'S COMPENSATION IS FIR: NDENT CONSULTING FIRM SPECIALIZING IN NO TTEE'S RECOMMENDATION TO THE BOARD OF IMENDATIONS AND REASONS FOR THE PRESID COMPENSATION IS THEN APPROVED BY VOTE RATIONS, DECISIONS, AND BOARD OF DIRECT 'S OF THE COMPENSATION COMMITTEE AND B YEES: THE ASSOCIATION UTILIZES A MULTIFAC IENT & CEO, BUT FOR ITS OFFICERS AND EMPL IPTIONS, SALARY RANGES FOR POSITIONS, SE ATIONS, MEASUREMENT OF PERFORMANCE, I MPORANEOUS SUBSTANTIATIONS OF THE PRO IBER 30, 2011, DESCRIBES THE PROCESS IN MO INSATION CONSULTING FIRM TO ADVISE THE B INSATION ADJUSTMENTS USUALLY ARE RECO 'ORS AND/OR OFFICERS. ADJUSTMENTS MUST IR AND VICE PRESIDENT INDIVIDUAL SALARY A TTEE BY THE PRESIDENT & CEO AND MUST BE VAND THEN REPORTED TO THE BOARD OF DIR	N-PROFIT ORGANIZATIC DIRECTORS. THE CHAIF UENT & CEO COMPENSA OF THE FULL BOARD. C ORS ACTION IS MAINTAI ORD OF DIRECTORS M ETED APPROACH TO D OYEES. THIS INCLUDES ETTING POSITION GOAL QUARTERLY, SEMI-ANN OCESS. THE ASSOCIATIC DRE DETAIL. THE ASSOCIATIC ORE DETAIL THE ASSOCIATIC ON DECOMPENSATION DIMENDED BY SUPERV ALSO BE APPROVED BY THE BO	DNS TO DETERMINE THE B RMAN OF THE BOARD THE XTION ADJUSTMENT, IF AM' CONTEMPORANEOUS SUE DINED IN THE TALENT OPEF MEETINGS. OTHER OFFICE ETERMINE COMPENSATIO S STABLISHING WRITTEN P IUAL OR ANNUAL GOAL RI DN'S CURRENT COMPENS CIATION ALSO RETAINS AN I COMMITTE, OFFICERS, A DISORS AND APPROVED B SY THE VICE PRESIDENT, T COMMENDED TO THE BOAR	OARD COMPENSATION N PRESENTS THE Y. THE PRESIDENT & ISTANTIATION OF THE RATIONS FILES AND RS OR KEY IN NOT ONLY FOR ITS POSITION ERFORMANCE EVIEW, AND ATION POLICY DATED I INDEPENDENT IND AGA LEADERSHIP. Y MANAGERS, ALENT OPERATIONS. RD COMPENSATION
FORM 990, PART VI, SECTION C, LINE 19	DOCUN "ABOU" ARE RE ARE PF	RGANIZATION MAKES THE INFORMATION AVAI MENTS, OFFICERS, BOARD MEMBERS AND ME I US." THE CONFLICT OF INTEREST STATEMEN PORTED TO THE ENTIRE BOARD AND OTHERS COVIDED TO THE ENTIRE MEMBERSHIP. FINANC THE ASSOCIATION ELECTRONICALLY BY REQU	MBERS ARE AVAILABLE IT IS ALSO AVAILABLE U S ON A QUARTERLY BA CIAL, GOVERNANCE ANI	E ON AGA'S WEBSITE (WM JNDER "ABOUT US." FINAM SIS. ANNUAL AUDITED FIN D OTHER INFORMATION C	W.AGA.ORG) UNDER ICIAL STATEMENTS ANCIAL STATEMENTS AN ALSO BE OBTAINED
FORM 990, PART XI, LINE 9:	FAS 15	8 ADJUSTMENT -541,935.			

For Paperwork Reduction Act Notice, see the Instructions for Form 990 or 990-EZ.

Schedule O (Form 990) 2021

Additional Data

Return to Form

Software ID: Software Version:

SCHEDULE R	Polatod	Organizations a	and Uprolator	1 Dartno	rehine			OMB No. 1	545-00	47
(Form 990)		anization answered "Yes	" on Form 990, Part		-		'.	202	21	
Department of the Treasury Internal Revenue Service	► Go to <u>ww</u>	<u>w.irs.gov/Form990</u> for	instructions and th	e latest info	rmation.			Open to Inspec		С
Name of the organization AMERICAN GAS ASSOCIATION						Emp	loyer identific			
							0431590			
Part I Identificatio	on of Disregarded Entities. Comple					/, line				
Name, address, and	(a) EIN (if applicable) of disregarded entity	(b) Primary a	ctivity Legal don	<b>(c)</b> nicile (state jn country)	(d) Total inco	ome	(e) End-of-year ass	sets Direct cont entity		
	n of Related Tax-Exempt Organizations during the		he organization a	nswered "Y	'es" on Fc	orm 99	90, Part IV, li	ine 34 because it ha	ad one	
	(a) d EIN of related organization	(b) Primary activity	(c) Legal domicile (stat or foreign country)	e Exempt C	(d) tode section		(e) ic charity status ction 501(c)(3))	(f) Direct controlling entity	Se 51 ( con en	(g) ection 12(b) (13) ntrolled ntity? s No
(1)AMERICAN GAS ASSN PAC COOD 400 NORTH CAPITOL STREET NW	07450	POLITICAL ACTION COMMITTEE	DC	527				AMERICAN GAS ASSOCIAT		
WASHINGTON, DC 20001 13-0431590										
										-
										+
										+
						1				1

Schedule R (Form 990) 2021

Page **2** 

(a)		(b)	(c)	(d)	(e)	(f)	(g)		(h)	(i)	(	j)	(k)
Name, address, and EIN of related organization			Legal domicile (state or foreign country)	Direct controlling entity	Predominant income(related, unrelated, excluded from tax under sections 512-514)	Share of total income	Share of end-of- year assets	Dispro	prtionate ations?	Code V-UBI amount in box 20 of Schedule K- 1 (Form 1065)	Gene mar	eral or haging ther?	Percent owners
								Yes	No		Yes	No	1
													┼──
Identification of Related Orga	nization	s Taxable	e as a Co	rporation	or Trust. Cor	nplete if	the orga	nization	answered	d "Yes" on	Form 9	90, Pari	t IV, lir
34 because it had one or more rel	ated orga	nizations	treated as	a corporat	ion or trust du	iring the	tax year	<b>`</b> .				1	
(a) Name, address, and EIN of related organization	(b) Primary a		Le don	nicile	(d) Direct controlling entity	(C cor	entity Sha p, S	(f) are of total income	(g) Share of er of-year	nd- Perce owne	ntage		(i) n 512(b)( olled entit
			(state o cou	r foreign ntry)		corp or tru			assets			Yes	N
												1	

Schedule R (Form 990) 2021

### Environmental Intervenors/312 Ryan/42

Pa	art V Transactions With Related Organizations. Complete if the organization answered "Yes" on Form 990, Part IV, line 34, 35b, or 36.			
	Note. Complete line 1 if any entity is listed in Parts II, III, or IV of this schedule.		Yes	No
1 [	During the tax year, did the orgranization engage in any of the following transactions with one or more related organizations listed in Parts II-IV?			
а	Receipt of (i) interest, (ii) annuities, (iii) royalties, or (iv) rent from a controlled entity	1a		No
b	Gift, grant, or capital contribution to related organization(s)	1b		No
с	Gift, grant, or capital contribution from related organization(s)	1c		No
d	Loans or loan guarantees to or for related organization(s)	1d		No
e	Loans or loan guarantees by related organization(s)	1e		No
f	Dividends from related organization(s)	1f		No
g	Sale of assets to related organization(s) · · · · · · · · · · · · · · · · · · ·	1g		No
h	Purchase of assets from related organization(s)	1h		No
i	Exchange of assets with related organization(s) · · · · · · · · · · · · · · · · · · ·	1i		No
j	Lease of facilities, equipment, or other assets to related organization(s)	1j		No
k	Lease of facilities, equipment, or other assets from related organization(s) · · · · · · · · · · · · · · · · · · ·	1k		No
I	Performance of services or membership or fundraising solicitations for related organization(s)	11		No
'n	Pérformance of services or membership or fundraising solicitations by related organization(s) · · · · · · · · · · · · · · · · · · ·	1m		No
n	Sharing of facilities, equipment, mailing lists, or other assets with related organization(s) · · · · · · · · · · · · · · · · · · ·	1n	Yes	
o	Sharing of paid employees with related organization(s) · · · · · · · · · · · · · · · · · · ·	10		No
р	Reimbursement paid to related organization(s) for expenses · · · · · · · · · · · · · · · · · ·	1p		No
q	Reimbursement paid by related organization(s) for expenses · · · · · · · · · · · · · · · · · ·	1q		No
r	Other transfer of cash or property to related organization(s)	1r	Yes	
s	Other transfer of cash or property from related organization(s) · · · · · · · · · · · · · · · · · · ·	1s		No
2	If the answer to any of the above is "Yes," see the instructions for information on who must complete this line, including covered relationships and transaction thresholds.			
	(a)(b)(c)(d)Name of related organizationTransaction type (a-s)Amount involved type (a-s)Method of determining amount type (a-s)	nount i	nvolvec	I

Schedule R (Form 990) 2021

Schedule R (Form 990) 2021

Page **3** 

Schedule R (Form 990) 2021

Page 4

Part VI Unrelated Organizations Taxable as a Partnership. Complete if the organization answered "Yes" on Form 990, Part IV, line 37. Provide the following information for each entity taxed as a partnership through which the organization conducted more than five percent of its activities (measured by total assets or gross revenue) that was not a related organization. See instructions regarding exclusion for certain investment partnerships.

revenue) that was not a related organization. See inst		Irding exclu											
(a) Name, address, and EIN of entity	<b>(b)</b> Primary activity	(c) Legal domicile (state or foreign country)	(d) Predominant income (related, unrelated, excluded from	se	(e) I partners action (c)(3) hizations?	(f) Share of total income	(g) Share of end-of-year assets	(h Dispropr allocat	) rtionate tions?	(i) Code V-UBI amount in box 20 of Schedule K-1	(j) Gener mana parti	al or aging	(k) Percentage ownership
			tax under sections 512- 514)	Yes	No			Yes	No	(Form 1065)	Yes	No	
											ala a du dia. D	(5	00) 2021

Schedule R (Form 990) 2021

4			
Schedule R (Form 990) 2021	1		Page 5
Part VII Supplement	ntal Inf	formation	
Provide addit	tional info	prmation for responses to questions on Schedule R. See instructions.	
Return Reference		Explanation	
			Schedule R (Form 990) 2021
Additional Data			Return to Form
		Software ID:	

Software ID: Software Version:

### Exhibit B

### The American Gas Association

The American Gas Association (AGA) is the trade association representing more than 200 gas supply companies.<sup>1</sup> AGA supports the use and production of fracked gas, and is financially supported by many utilities.

AGA regularly engages in lobbying and other political advocacy. AGA reported over \$1 million in lobbying in both 2019 and 2020.<sup>2</sup>

AGA engages in a host of controversial political advocacy, including:

- Supporting nationwide construction permits that risk environmental damage;<sup>3</sup>
- Actively participating in litigation seeking to lessen environmental protections;<sup>4</sup>
- Opposing changes to the International Code Council's codes codes that are widely adopted around the world that would have made electric vehicle-ready wiring and accommodations for electric-powered appliances an automatic feature of new buildings;<sup>5</sup>
- Promoting the gas economy and associated infrastructure, despite the critical need to phase out reliance on fossil fuels as we move to a clean energy economy,<sup>6</sup> including:

<sup>&</sup>lt;sup>1</sup> See American Gas Association Overview (2019), <u>https://www.aga.org/globalassets/2019-aga-overview-updated.pdf</u>.

<sup>&</sup>lt;sup>2</sup> See Client Profile: American Gas Association, Center for Responsive Politics (2020), https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2020&id=D000000447; Client Profile: American Gas Association, Center for Responsive Politics (2019), https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2019&id=D000000447.

<sup>&</sup>lt;sup>3</sup> See AGA, Comments on Army Corps Nationwide Permit program (Nov. 16, 2020), <u>https://www.aga.org/contentassets/dbb38587fe1e4701adc8a5c6fb128201/aga-nwp-reissuance-comments-final-nov-16-2020.pdf</u>.

<sup>&</sup>lt;sup>4</sup> See AGA, AGA NWP 12 Coalition Files Brief in 9th Circuit Challenging District Court Order on NWP 12, https://www.aga.org/research/policy/aga-nwp-12-coalition-files-brief-in-9th-circuit-challenging-district-court-orderon-nwp-12/.

<sup>&</sup>lt;sup>5</sup> See David Iaconangelo, EVs Dealt Major Blow in Building Code Ruling, E&E News (Oct. 22, 2020), https://www.eenews.net/energywire/2020/10/22/stories/1063716823.

- Advocating for the increased development of new gas pipeline infrastructure;<sup>7</sup>
- Coordinating campaigns to mislead the public regarding the climate costs of natural gas;<sup>8</sup>
- Funding social media ad and "influencer" campaigns to promote natural gas use;<sup>9</sup>
- Creating "educational" materials for children claiming gas is a "very safe energy source," despite its negative public health impacts that disproportionately harm children;<sup>10</sup>
- Fighting local electrification ordinances that would prohibit gas heating and appliances in new buildings;<sup>11</sup> and
- Supporting members' advocacy efforts in favor of state legislation that would preemptively prohibit local building electrification ordinances including for public universities.<sup>12</sup>

<sup>6</sup> See also, Food and Water Watch, Fracking's Bridge to Climate Chaos Exposing the Fossil Fuel Industry's Deadly Spin (2020), <u>https://foodandwaterwatch.org/sites/default/files/rpt\_2001\_frackingbridgetoclimatechaos-web.pdf</u>.

<sup>7</sup> See AGA Playbook 2021, <u>http://playbook.aga.org/</u>.

<sup>8</sup> See Hiroko Tabuchi, A Secret Recording Reveals Oil Executives' Private Views on Climate Change: At a meeting last year, industry leaders contradicted public claims that emissions of climate-warming methane are under control, New York Times, Sept. 20, 2020, <u>https://www.nytimes.com/2020/09/12/climate/methane-natural-gas-flaring.html</u>.

<sup>9</sup> See Jeff Brady and Dan Charles, *As Cities Grapple With Climate Change, Gas Utilities Fight To Stay In Business*, NPR (Feb. 22, 2021), <u>https://www.npr.org/2021/02/22/967439914/as-cities-grapple-with-climate-change-gas-utilities-fight-to-stay-in-business</u>; *see also* Rebecca Leber, *The Gas Industry Is Paying Instagram Influencers to Gush Over Gas Stoves*, Mother Jones (June 17, 2020), <u>https://www.motherjones.com/environment/2020/06/gas-industry-influencers-stoves/</u>.

<sup>10</sup> See Kate Yoder, Oil and gas coloring books teach kids safety, fossil fuel dependence, Grist, June 29, 2020, <u>https://grist.org/energy/oil-and-gas-coloring-books-teach-kids-safety-fossil-fuel-dependence/</u>.

<sup>11</sup> See, e.g., Emily Holden, Amal Ahmed, and Brendan Gibbons, A Texas city had a bold new climate plan – until a gas company got involved, The Guardian (Mar. 1, 2021), <u>https://www.theguardian.com/usnews/2021/mar/01/a-texas-city-had-a-bold-new-climate-plan-until-a-gas-company-got-involved</u> (quoting an AGA statement that the association "will absolutely oppose any effort to ban natural gas or sideline our infrastructure anywhere the effort materializes, state house or city steps"); Jeffrey Tomich, *Gas ban backlash spreads across the U.S.*, E&E News (Feb. 2, 2021), <u>https://www.eenews.net/energywire/stories/1063724065</u>; Steven Mufson, *The battle over climate change is boiling over on the home front*, The Washington Post (Feb. 23, 2021), <u>https://www.washingtonpost.com/climate-environment/2021/02/23/climate-change-natural-gas/</u>.

<sup>12</sup> See, e.g., Sarah Bowman and London Gibson, *Banning natural gas would cut emissions. But lawmakers don't want that happening in Indiana*, Indianapolis Star (Mar. 3, 2021), https://www.indystar.com/story/news/environment/2021/03/03/indiana-general-assembly-tries-stop-cities-banning-

#### The Nuclear Energy Institute

The Nuclear Energy Institute (NEI) is the trade association for the nuclear power industry.<sup>13</sup> Its dues-paying members include myriad private utilities as well as public power entities like the Tennessee Valley Authority,<sup>14</sup> many of which pass NEI membership dues on to ratepayers.

NEI engages in myriad forms of political advocacy. NEI reported approximately \$2 million on lobbying in both 2019 and 2018.<sup>15</sup>

NEI not only advocates for nuclear power, which the Supreme Court itself has characterized as a "controversial issue[]," *Consolidated Edison Co. v. PSC*, 447 U.S. 530, 543 (1980), and for ratepayers to subsidize nuclear power,<sup>16</sup> but its controversial policy priorities also include both preserving existing nuclear plants<sup>17</sup> and building small modular reactors<sup>18</sup> – a technology which is not in production, and, thus, for which it is controversial to consider dedicating resources that could be earmarked to build out existing and true clean energy sources, such as wind and solar.

<sup>13</sup> See Nuclear Energy Institute, <u>https://www.nei.org/home</u>.

<sup>14</sup> See NEI Member Roster, <u>https://www.nei.org/CorporateSite/media/filefolder/Membership/member-roster.pdf?ext=.pdf</u>.

<sup>15</sup> See Client Profile: Nuclear Energy Institute, Center for Responsive Politics (2019), https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2019&id=D000000555; see also Client Profile: Nuclear Energy Institute, Center for Responsive Politics (2018), https://www.opensecrets.org/lobby/clientsum.php?id=D000000555&year=2018; see also U.S. Senate Office of Public Records, Nuclear Energy Institute Search Results (2017-2018), Query the Lobbying Disclosure Act Database, https://soprweb.senate.gov/index.cfm?event=processSearchCriteria.

<sup>&</sup>lt;u>natural-gas/4540329001/</u> (describing AGA member companies' efforts to pass H.B. 1191, an anti-electrification bill, and highlighting an AGA letter stating that the association group is "increasingly active" in similar state-level efforts).

<sup>&</sup>lt;sup>16</sup> See NEI, "The Nuclear Production Tax Credit," available at <u>https://www.nei.org/advocacy/build-new-</u>reactors/nuclear-production-tax-credit.

<sup>&</sup>lt;sup>17</sup> See NEI, "Preserve Nuclear Plants," available at <u>https://www.nei.org/advocacy/preserve-nuclear-plants.</u>

<sup>&</sup>lt;sup>18</sup> See NEI, "With New Reactors, a Better World Awaits," available at <u>https://www.nei.org/advocacy/build-new-reactors</u>.

Center for Biological Diversity Petition To Amend The Uniform System of Accounts Exhibit B, Page 4

As a recent example, in 2019, NEI supported highly controversial Ohio House Bill 6 (HB 6),<sup>19</sup> which subsidized two nuclear plants and two coal plants, while drastically weakening renewable and energy efficiency policy in the state, thus slowing the state's transition to a clean and renewable energy portfolio.<sup>20</sup> Then, in 2020, the FBI arrested Ohio House Speaker Larry Householder and three others on racketeering charges over the passage of HB 6. Householder allegedly created multiple nonprofits to funnel more than \$60 million to political candidates in exchange for their support of the \$1.3 billion bailout bill.<sup>21</sup> Nuclear Energy Institute leadership has since decried the illegality of Householder's actions<sup>22</sup> but has not rescinded their support for the bill, despite widespread calls for its repeal.<sup>23</sup>

<sup>&</sup>lt;sup>19</sup> See David Roberts, *Ohio just passed the worst energy bill of the 21st century*, Vox (July 27, 2019), <u>https://www.vox.com/energy-and-environment/2019/7/27/8910804/ohio-gop-nuclear-coal-plants-renewables-efficiency-hb6</u>.

<sup>&</sup>lt;sup>20</sup> See NEI, Ohio Introduces Bill to Value Zero-Carbon Energy Sources, https://www.nei.org/news/2019/ohio-introduces-bill-value-zero-carbon-energy.

<sup>&</sup>lt;sup>21</sup> See John Funk, Ohio attorney general sues to block \$1.3B bailout of former FirstEnergy nuclear plants, Utility Dive (Sept. 25, 2020), <u>https://www.utilitydive.com/news/ohio-attorney-general-sues-to-block-13b-bailout-of-former-firstenergy-nuc/585835/</u>.

<sup>&</sup>lt;sup>22</sup> See Maria Korsnick, Opinion: Carbon-free nuclear energy is still essential to Ohio's future, Cleveland.com (Sept. 3, 2020), <u>https://www.cleveland.com/opinion/2020/09/carbon-free-nuclear-energy-is-still-essential-to-ohios-</u> <u>future-maria-korsnick.html</u> (explaining NEI's position on the policy goals of HB 6).

<sup>&</sup>lt;sup>23</sup> See Jessie Balmert, Ohio lawmakers could delay nuclear plant fees from scandal-tainted House Bill 6, Cincinnati Enquirer (Dec. 16, 2020), <u>https://www.cincinnati.com/story/news/politics/2020/12/17/ohio-lawmakers-</u> <u>delay-nuclear-plant-fees-scandal-tainted-house-bill-6/3924318001/</u> (describing a "wide swath" of organizations supporting a repeal of the bill).

#### The American Public Power Association

The American Public Power Association (APPA) is the industry association group for public power utilities.<sup>24</sup> Although those utilities are not generally subject to direct FERC regulation, as noted, the states and other regulators who do regulate them often follow the USofA, and APPA member utilities pay for membership.

The APPA reported over \$800,000 for lobbying in 2019, and \$780,077 in 2018.<sup>25</sup> APPA also contributes to political PACs.<sup>26</sup>

The Association's controversial political positions and political activities include:

- Opposing efforts to establish a federal renewable electricity standard;<sup>27</sup>
- Opposing federal efforts to improve rate design coordination and grid integration of Distributed Energy Resources (DER);<sup>28</sup>
- Promoting outdated and inaccurate views on DER costs, with inaccurate public statements on cost-shifting;<sup>29</sup>

<sup>26</sup> See Contributions to Federal Candidates, 2018 cycle, American Public Power Assn, https://www.opensecrets.org/pacs/pacgot.php?cmte=C00161570&cycle=2018; see also U.S. Federal Election Commission, American Public Power Association, Public Ownership of Electric Resources PAC (C00161570), 2017-2018 Disbursements, Campaign Finance Data, https://www.fec.gov/data/disbursements/?committee\_id=C00161570&two\_year\_transaction\_period=2018&data\_typ e=processed.

<sup>&</sup>lt;sup>24</sup> See APPA, <u>https://www.publicpower.org/</u>.

<sup>&</sup>lt;sup>25</sup> See Client Profile: American Public Power Assn, Center for Responsive Politics (2019), <u>https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2019&id=D000023996</u>; Client Profile: American Public Power Assn, Center for Responsive Politics (2018), <u>https://www.opensecrets.org/lobby/clientsum.php?id=D000023996&year=2018</u>; see also U.S. Senate Office of Public Records, American Public Power Search Results (2017-2018), Query the Lobbying Disclosure Act Database, <u>https://soprweb.senate.gov/index.cfm?event=processSelectFields</u>.

<sup>&</sup>lt;sup>27</sup> See Testimony of Susan N. Kelly, President and CEO of APPA, before the Senate Committee on Energy and Natural Resources, Hearing on Energy Supply Legislation at 7 (2015), available at <u>https://www.energy.senate.gov/public/index.cfm/files/serve?File\_id=DA7A11A4-9DF2-4ABC-B01A-EA4FCF58471F.</u>

<sup>&</sup>lt;sup>28</sup> See APPA, Issue Brief: Distributed Energy Resources, 2 (2019), available at https://www.publicpower.org/system/files/documents/23%20Distributed%20Energy%20Resources.pdf.

Center for Biological Diversity Petition To Amend The Uniform System of Accounts Exhibit B, Page 6

- Urging repeal of the Clean Power Plan and supporting a weakened replacement rule;<sup>30</sup>
- Opposing the regulation of carbon dioxide and greenhouse gas emissions from existing facilities under the Clean Air Act;<sup>31</sup> and
- Opposing the Waters of the United States (WOTUS) rule in 2015 by advocating that it be withdrawn and re-proposed with narrower parameters.<sup>32</sup>

<sup>30</sup> See Ciampoli, P. Association urges repeal, replacement of Clean Power Plan, American Public Power Association (2018), available at <u>https://www.publicpower.org/periodical/article/association-urges-repeal-</u> <u>replacement-clean-power-plan</u>; see also APPA, Comments on EPA's Proposed rule: Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing regulations; Revisions to New Source Review Program, Commonly called the Affordable Clean Energy Rule or ACE Rule, 5 (2018), available at

https://www.publicpower.org/system/files/documents/Final%20APPA%20Comments%20on%20the%20Proposed% 20ACE%20Rule.pdf.

<sup>31</sup> See American Public Power Association, Comments of the American Public Power Association On the U.S. Environmental Protection Agency's Advance Notice of Proposed Rulemaking on Greenhouse Gas Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 61,507 (Dec. 28, 2017) Docket Id. No. EPA-HQ-OAR-2017-0545,

https://www.publicpower.org/system/files/documents/Final%20APPA%20Comments%20on%20the%20Proposed% 20ACE%20Rule.pdf.

<sup>32</sup> See American Public Power Association, *Environment Issue Brief: Waters of the United States*, 3 (2017) available at <a href="https://www.publicpower.org/system/files/documents/waters\_of\_the\_united\_states\_0.pdf">https://www.publicpower.org/system/files/documents/waters\_of\_the\_united\_states\_0.pdf</a>.

<sup>&</sup>lt;sup>29</sup> See APPA, Leadership in Rate Design, 9 (2019), available at <u>https://www.publicpower.org/system/files/documents/Leadership-in-Rate-Design.pdf</u> (where APPA claims net metering "takes advantage of the disconnect between how fixed and variable costs are incurred and how they are passed through to customers, causing potentially severe cost shifting among customer classes, often in a socially regressive way," despite expansive research demonstrating the contrary).

#### The National Rural Electric Cooperatives Association

The National Rural Electric Cooperatives Association (NRECA) is the trade group for utility cooperatives.<sup>33</sup> Those cooperatives, like most other electricity providers, follow the USofA,<sup>34</sup> and pay NRECA for their membership.

NRECA reported approximately \$2.5 million in lobbying in 2019, and in 2018.<sup>35</sup> NRECA also provides significant funds to PACs, including being a top contributor among all utilities and their trade associations to the 147 members of Congress who voted to overturn the 2020 presidential election results.<sup>36</sup>

NRECA has long engaged in political advocacy, such as:

- Vociferously opposing the Obama administration's Clean Power Plan;<sup>37</sup>
- Supporting the Trump administration's controversial efforts to gut the National Environmental Policy Act, the national charter for protection of the environment;<sup>38</sup> and
- Supporting the Trump administration's gutting of Clean Air Act protections by replacing the Clean Power Plan with the "ACE" Rule.<sup>39</sup>

<sup>35</sup> *Client Profile: NRECA*, Center for Responsive Politics (2019), <u>https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2019&id=D000000153</u>; *Client Profile: NRECA*, Center for Responsive Politics (2018), <u>https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2018&id=D000000153</u>.

<sup>36</sup> See Matt Kasper, Some utility companies "pause" or "evaluate" PAC giving; others remain silent, Energy and Policy Institute (Jan. 15, 2021), <u>https://www.energyandpolicy.org/utility-companies-pause-evaluate-pac-giving-after-capitol-hill-attack/</u>.

<sup>37</sup> See Rod Kuckro, Coal-heavy electric cooperatives take hard line on EPA Clean Power Plan, E&E News, (Dec. 15, 2014), <u>https://www.eenews.net/stories/1060010539</u>; NRECA, Comments on the Clean Power Plan (Dec. 1, 2014), <u>https://www.eenews.net/assets/2014/12/15/document\_ew\_01.pdf</u>.

<sup>38</sup> NRECA, "Electric Coops Support NEPA Reforms," <u>https://www.electric.coop/issues-and-policy/environment/</u>.

<sup>39</sup> NRECA, "Co-ops Praise EPA's New Clean Energy Rule for Setting Achievable Goals," <u>https://www.electric.coop/issues-and-policy/environment/</u>.

<sup>&</sup>lt;sup>33</sup> See NRECA, <u>https://www.electric.coop/our-mission/</u>.

<sup>&</sup>lt;sup>34</sup> See 7 C.F.R. Subpart B.



American Gas Association Evaluation of Report Health Effects from Gas Stove Pollution Rev 7.14.2020

The Rocky Mountain Institute (RMI), in collaboration with Mothers Out Front, Physicians for Social Responsibility, and Sierra Club, released a report titled *Health Effects from Gas Stove Pollution*, here referred to as "RMI" or the "RMI report."<sup>1</sup>

The RMI report is one of several reports, slide decks, and blogs that RMI has crafted to support policies to limit or remove the option of natural gas from homes and incentivize or mandate electric appliances in homes and businesses.<sup>2</sup>

AGA has conducted a review of *Health Effects from Gas Stove Pollution*. The following paper evaluates and responds to the eight specific claims stated in the Executive Summary of the RMI report. Note that, in some cases, the claims differ from similarly enumerated statements made in the body of the report. Those discrepancies are addressed.

Some of the findings in the *Health Effects from Gas Stove Pollution* are not justified based on the report's supporting statements and citations. Furthermore, the report's conclusions and recommendations are not sufficiently substantiated for making policy or consumer decisions about energy choices.

## Claim 1. Indoor air is largely unregulated and is often more polluted than outdoor air.

The US Environmental Protection Agency (EPA)-led <u>Federal Interagency Committee on</u> <u>Indoor Air Quality (CIAQ)</u> has responsibility across several federal agencies for indoor air quality (IAQ) issues, including residential IAQ and asthma. The Interagency Committee includes the departments of Commerce, Defense, Energy, Health and

<sup>&</sup>lt;sup>1</sup>Health Effects from Gas Stove Pollution <u>https://rmi.org/insight/gas-stoves-pollution-health/</u> <sup>2</sup> Rocky Mountain Institute:

<sup>&</sup>quot;The Impact of Fossil Fuels in Buildings." January 2020. <u>https://rmi.org/insight/the-impact-of-fossil-fuels-in-buildings/</u>

<sup>&</sup>quot;Fossil Gas Has No Future in Low-Carbon Buildings." January 2020. <u>https://rmi.org/fossil-gas-has-no-future-in-low-carbon-buildings/</u>

<sup>&</sup>quot;A New Approach to America's Rapidly Aging Gas Infrastructure." January 2020. <u>https://rmi.org/a-new-approach-to-americas-rapidly-aging-gas-infrastructure/</u>

<sup>&</sup>quot;The Economics of Electrifying Buildings." 2018. <u>https://rmi.org/insight/the-economics-of-electrifying-buildings/</u>

Human Services, Housing and Urban Development, Interior, Justice, Labor, State, Transportation, and the Treasury, as well as Consumer Product Safety Commission, the EPA, and other federal authorities. The work of the Interagency Committee routinely addresses IAQ issues of public importance. The Interagency Committee has not identified gas cooking emissions as an important issue concerning asthma or respiratory illness.

The Consumer Product Safety Commission is the lead federal authority on reviewing consumer health and safety associated with natural gas appliances. At present, the CPSC has expressed no concerns over gas cooking appliances as a risk to consumers.

RMI cites the EPA web page, "Why Indoor Air Quality is Important to Schools." On the page, EPA writes that "There is substantial evidence that indoor environmental exposure to allergens, such as dust mites, pests and molds, plays a role in triggering asthma symptoms. These allergens are common in schools. There is also evidence that exposure to diesel exhaust from school buses and other vehicles exacerbates asthma and allergies." EPA does not identify gas equipment or gas cooking appliances in this context.<sup>3</sup>

### Claim 2. Gas stoves can be a large source of toxic pollutants indoors.

RMI writes that "[c]ooking food, <u>regardless of the type of stove used</u> [emphasis added], produces certain pollutants, such as particulate matter." Indeed, studies have consistently found that emissions from the cooking process—not from the burner or heat source operation—represent the chief source of concern concerning indoor air quality.<sup>4</sup>

With respect to gas cooking equipment, combustion emissions from gas ranges, ovens, and cooktops can contribute to some degree to emissions of NO<sub>2</sub> and other recognized pollutants. However, <u>federal health and safety agencies have not identified specific health or safety issues or studies supporting policies for regulating unvented combustion appliances or their use since changes to the safety standard for unvented heaters were made in the North American standards for safety in the 1980s and testing and labeling for NO<sub>2</sub> emissions were implemented in the 1990s.</u>

An extensive AGA review of relevant literature from the US Environmental Protection Agency (EPA), US Consumer Product Safety Commission (CPSC), US Department of Housing and Urban Development, and other federal agencies has not identified specific needs for limiting combustion emissions beyond the current safety standards limit for NO<sub>2</sub> emissions from unvented space heaters.

<sup>&</sup>lt;sup>3</sup> <u>https://www.epa.gov/iaq-schools/why-indoor-air-quality-important-schools</u>

<sup>&</sup>lt;sup>4</sup> Abdullahi, L., Delgado S., Juana M., Harrison, R., "Emissions and Indoor Concentrations of Particulate Matter and Its Specific Chemical Components from Cooking: A Review," Atmospheric Environment, vol. 41, pp. 260-294, June 2013.

All certified gas appliances must meet emission limits set by the Z21/83 standards committee using its American National Standards Institute (ANSI)-approved standards procedures. Concerning safety standards for CO emissions, studies show that gas ranges produce considerably less than the allowable maximum in the standard. An analysis by Battelle Memorial Institute under sponsorship by GRI has shown that the CO limit is conservative in protecting public safety and health in terms of exposure levels that can result from oven use.<sup>5</sup> The CO emission limit in the Z21.1 standard is based on exposure due to misuse of the oven as a space heater.

It is essential that an installed gas range, oven, or cooktop has been design certified to the ANS Z21.1 standard, which includes requirements for proper operation and limits on emissions. Natural gas kitchen appliances should be installed in accordance with manufacturer installation instructions and local installation codes such as the International Fuel Gas Code or the National Fuel Gas Code. And a gas range should be maintained in good working order and periodically inspected by a qualified technician.

# Claim 3. Indoor pollution from gas stoves can reach levels that would be illegal outdoors.

The claim of a relationship of gas cooking emissions and exceeding outdoor standards for health-related pollutants is not justified by the literature cited in the report. Two principal studies are referenced in support, and <u>neither study measured emission</u> exposures in households. Additionally, RMI incorrectly compares a "peak" emissions event of NO<sub>2</sub> to a time-averaged standard based on long-term exposure.

The first study cited is Logue et al. (2014) published in *Environmental Health Perspectives*.<sup>6</sup> The Logue et al. study presented the results of a simulation model. While that fact alone does not invalidate the analysis, the study's applicability to the broad statement about indoor pollution as claimed is limited.

The study simulation relied upon modeling assumptions concerning emission source rates, the mass balance approach used, occupancy patterns, cooking appliance operation pattern, and occupant response to both cooking effluent and combustion productions. Behavior-related variables associated with residential cooking appear to be lacking from the model, which is a significant omission since the association of combustion product accumulation from cooking appliances and kitchen temperature rise has long been the basis for limiting combustion emissions. Finally, the emission factors assumed for cooking appliances, the initial inputs to modeling pollutant exposures, appear to come from an LBNL study of natural gas combustion emissions associated

<sup>&</sup>lt;sup>5</sup> U. S. Environmental Protection Agency, "Review of the National Ambient Air Quality Standards for Carbon Monoxide, Assessment of Scientific and Technical Information: OAQPS Staff Paper," EPA-452/R-92-004, Aug. 1992. (

<sup>&</sup>lt;sup>6</sup> Jennifer M Logue et al., Pollutant Exposures from Natural Gas Cooking Burners: A Simulation-Based Assessment for Southern California, 122 ENVIRONMENTAL HEALTH PERSPECTIVES 43 (2014), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3888569/

with imported LNG, which would produce different emission characteristics. Also, it is unclear from documentation of both the modeling study or the previous LBNL study whether the emission factors used are based upon peak concentrations of pollutants, time-averaged concentrations, and a hybrid of peak and time-averaged measurements.

The second article cited Singer et al. (2017), a study performed to examine residential cooking appliance exhaust hood design and use beginning with its publication in 2013 and updated in 2017, but which included authors' inferences about cooking appliance combustion emissions absent of cooking processes.<sup>7</sup> AGA's review found the study results inadequate to justify the researcher's conclusions regarding combustion emissions and exposures. The following abbreviated criticisms emerged from AGA's review:

- The studies made far-reaching conclusions concerning natural gas-fired cooking products based on an unvalidated set of coupled, dissimilar modeling methods. No actual emissions exposures were measured.
- Key intermediate calculations and initial estimates were not reported in association with exposure calculations and, therefore, could not be reviewed to assess their validity.
- The emission factors used for cooking appliances, the initial inputs to modeling pollutant exposures, appeared to come from an LBNL study of natural gas combustion emissions associated with imported LNG, which would produce different emission characteristics.
- Time scales between pollutant generation events and "acute" concentration thresholds did not align, and the lags were not explained.
- Occupancy factors in determining exposure appeared to come from different, likely incompatible literature sources.
- Modeling results placed major importance on very short-term exposures (less than one hour), creating additional uncertainties over modeling validity.

Finally, RMI compares indoor "peak" emissions of NO<sub>2</sub> with time-averaged concentrations based on emission exposure levels. However, it is not correct to compare a "peak" emissions event to a standard based on "long-term exposure." Long-term exposures would, at a minimum and with respect to health standards, be associated with a continuous 24-hour and annual average exposure. Gas cooking NO<sub>2</sub>

<sup>&</sup>lt;sup>7</sup> Brett C. Singer et al, Pollutant Concentrations and Emission Rates from Scripted Natural Gas Cooking Burner Use in Nine Northern Californian Homes, Lawrence Berkeley National Laboratory, 2016, p. 5, https://escholarship.org/uc/item/859882pw

generation events last a period of minutes to, perhaps once or twice annually for 4 to 6 hours under normal usage patterns. Beyond NO<sub>2</sub> generation cycles, NO<sub>2</sub> decays in household environments, so that exposures from a static generation event are not prolonged and accumulative.

--

The CSA Group recently conducted testing to develop independent data on NO<sub>2</sub> emissions from gas ranges. Four residential natural gas ranges, including integrated cooktops and ovens from different manufacturers, were tested using the standard test protocol for these products documented in the consensus national standard. Combustion products were sampled for nitrogen dioxide (NO<sub>2</sub>) using the current regulatory protocol effective in the State of California.

Steady-state emissions rates for NO2 were measured for cooktops and ovens and used to calculate "air-free" NO2 emissions factors for comparison purposes. "Air-free" emission rates are rates in parts per million (ppm) in undiluted combustion products. Results demonstrated that natural gas range emissions of NO<sub>2</sub> during normal operation of cooktop burners and ovens were consistent with limits imposed by standards for safety for unvented heating appliances. The limit for air-free NO<sub>2</sub> emission rate for unvented space heaters is set at 20 ppm. No NO<sub>2</sub> limits are in effect for natural gas ranges under current standards. Because natural gas ranges during normal cooking operations are operated more intermittently and for shorter periods than unvented gas space heaters, and typically have lower natural gas input rates, the contribution of NO<sub>2</sub> to the indoor environment is even less than would be expected than for unvented space heaters.

Comparison of the CSA Group results to other notable studies requires conversion of the results from ppm measurements to mass flux emission rates, which is currently underway. Once data conversions are completed, the CSA Group results provide, for the first time, transparent data on source emission rates for NO2 for indoor air quality modeling and exposure estimates and for comparison to other studies of residential natural gas ranges.

# Claim 4. There are well-documented risks to respiratory health from gas stove pollution.

<u>This claim, which appears in the RMI report executive summary, is not repeated,</u> <u>detailed, or supported by the information in the RMI report or the cited literature.</u> The claim differs significantly from the similarly numbered statement in the report's body, which reads, "The risks to respiratory health from NO<sub>2</sub> are well-documented." The risks to respiratory health from NO<sub>2</sub> *are* well-documented. The RMI report cites several studies as evidence of the association of NO<sub>2</sub> exposure and specific health risks.<sup>8</sup> However, the relevance of the studies cited needs to be assessed when compared with the consensus public health literature and US Environmental Protection Agency 1,148-page *Integrated Science Assessment for Oxides of Nitrogen – Health Criteria* which considers all health and technical literature in consideration of changes to the NAAQS thresholds (which is cited). The "criteria" document provides the US EPA's evaluation and synthesis of the most policy-relevant science related to the health effects of gaseous oxides of nitrogen, including a detailed treatment covering asthma and specific consideration of natural gas combustion products such as NO<sub>2</sub>.<sup>9</sup>

The EPA "criteria" document is developed for setting outdoor standards and presents the most detailed and systematic analysis of all health-related literature associated with airborne-emissions. The document is reviewed through the Clean Air Scientific Advisory Committee (CASAC) process supporting the National Ambient Air Quality Standards (NAAQS). The five-year revision cycle to the NAAQS requires a comprehensive EPA review of health studies and data. This review is the most exhaustive and complete public agency review of health information conducted in the US. All published health literature is reviewed and screened in accordance with a consensus on the merits of the research in justifying support of or reconsideration of outdoor air quality standards for the criteria pollutants. Since human health outcomes depend upon both outdoor and indoor exposures to criteria pollutants, indoor exposures are equally relevant to the CASAC process.

Concerning RMI's statement that "There are well-documented risks to respiratory health from gas stove pollution," this claim is unfounded in the consensus public health literature.

Ruifeng Li et al., Association of indoor nitrogen dioxide with respiratory symptoms in children: Application of measurement error correction techniques to utilize data from multiple surrogates, Journal of Exposure Science & Environmental Epidemiology 16, 2006, https://doi.org/10.1038/ sj.jes.7500468.

Devon C. Payne-Sturges et al., "Healthy Air, Healthy Brains: Advancing Air Pollution Policy to Protect Children's Health," American Journal of Public Health 109, 2019, https://doi.org/10.2105/ AJPH.2018.304902.

Eva Morales et al., "Association of Early-life Exposure to Household Gas Appliances and Indoor Nitrogen Dioxide with Cognition and Attention Behavior in Preschoolers," American Journal of Epidemiology Vol. 169, No. 11, June 2009, https://doi.org/10.1093/aje/kwp067.

 <sup>9</sup> U. S. Environmental Protection Agency, "Integrated Science Assessment for Oxides of Nitrogen – Health Criteria," EPA/600/R-15/068, January 2016.

<sup>&</sup>lt;sup>8</sup> Kathleen Belanger et al, "Household levels of nitrogen dioxide and pediatric asthma severity", Epidemiology 24(2), March 2013, p. 320–330, <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3686297/</u>

Weiwei Lin, Bert Brunekreef, and Ulrike Gehring, "Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children," International Journal of Epidemiology, Volume 42, Issue 6, (December 2013): 1724–1737, https://doi.org/10.1093/ije/dyt150.

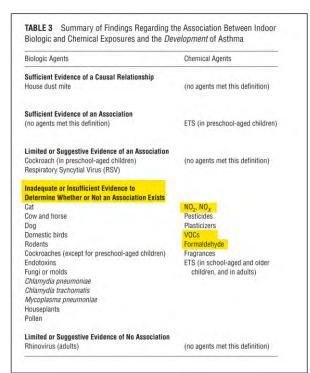
While NO<sub>2</sub> at high concentrations is associated with "exacerbation" of asthma in asthmatic children and adults (i.e., asthma attacks), this association is only relevant for relatively high concentrations that underpin the National Ambient Air Quality Standards (NAAQS) for NO<sub>2</sub>.

Concerning the *development* of asthma, according to the Institute of Medicine, *Clearing the Air: Asthma and Indoor Air Exposures*, natural gas combustion emissions, including those listed in the claims and others, are listed as IAQ agents for which "Inadequate or Insufficient Evidence to Determine Whether or Not an Association Exists" in causing the development of asthma.<sup>10</sup> The classification of asthma agents (dealing with both development or "exacerbation" of asthma, the latter pertaining to asthma attacks among individuals with pre-existing diagnosed asthma) are as follows:

- 1) "Sufficient Evidence of a Causal Relationship,"
- 2) "Sufficient Evidence of an Association,"
- 3) "Limited or Suggestive Evidence of an Association,"

# 4) "Inadequate or Insufficient Evidence to Determine Whether or Not an Association Exists,"

5) "Limited or Suggestive Evidence of No Association."



Source: National Institute of Medicine, Clearing the Air: Asthma and Indoor Air Exposures (Permission for Reproduction Pending)

<sup>&</sup>lt;sup>10</sup> National Institute of Medicine, <u>Clearing the Air: Asthma and Indoor Air Exposures</u>, Washington, DC: National Academy Press, 2000, pp. 8-11.

In the case of NO<sub>2</sub> from combustion sources, AGA reviewed the most recent Criteria Document, the Integrated Science Assessment for Oxides of Nitrogen – Health Criteria, for any updated findings concerning an association with natural gas appliance emissions of NO<sub>2</sub> and health effects since the publication of "Clearing the Air." That review concludes that, while an evaluation of asthma development and exacerbation is covered in-depth and with a wealth of new studies, the Clearing the Air findings from 2000 are not contradicted on the basis of NO<sub>2</sub> emissions. While it has been nineteen years since the publication of "Clearing the Air," no new contradicting conclusions regarding the development of asthma and exposure combustion products have been adopted by the responsible public health community and through its various consensus processes. The National Institute of Medicine (now the National Academy of Medicine) has not supplemented or updated its findings over this period. Likewise, a review of health and guidance literature from the responsible public health agencies, ranging from simple agency guidance to detailed technical analysis of specific combustion product exposures and health effects, found none that contradicted the 2000 National Institute of Medicine's findings.

# Claim 5. Children are particularly at risk of respiratory illnesses associated with gas stove pollution.

The claim of relationship to childhood risk of asthma, the percentage risk increases cited, and the contribution of gas cooking is not justified by the cited technical literature. The actual contribution of natural gas cooking emissions to IAQ was not examined in the studies considered. The claimed asthma frequencies as they relate to natural gas cooking appliances are, as a consequence, unjustified. "Exposure to a gas stove" is not exposure to emission products from combustion.

The quantitative statements of childhood asthma risk are based upon "meta-analysis" of 1,064 articles conducted by Weiwei Lin et al. (2013).<sup>11</sup> This work expands upon a 1992 meta-analysis covering 58 sources by Hasselblad, et al. (1992).<sup>12</sup>

Note that the meta-analysis study is not included in the NO<sub>2</sub> Criteria Document because it communicates meta-analysis results only and does not present reviewable fundamental scientific knowledge that could be used in deliberations on appropriate air quality standards or their reconsideration on new evidence. However, several of the references included in the meta-analysis are included in the EPA HERO database and thus have been included in the literature review of the NO<sub>2</sub> Criteria Document as reviewed through the Clean Air Scientific Advisory Committee (CASAC) process.

<sup>&</sup>lt;sup>11</sup> Hasselblad, V. I., D. M. Eddy, D. J. Kotchmar, "Synthesis of Environmental Evidence: Nitrogen Dioxide Epidemiology Studies," <u>Journal of Air and Waste Management</u>, 42(5), May 1992, pp. 662-71.

<sup>&</sup>lt;sup>12</sup> Weiwei Lin et al., Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children, 42 INTERNATIONAL JOURNAL OF EPIDEMIOLOGY 1724 (2013), available at https://doi.org/10.1093/ije/dyt150.

Following a review of the literature included in the Hasselblad meta-analysis, it was found that none of the citations presented sufficient causative associations that would link the use of these appliances to asthma or other respiratory illnesses. Natural gas cooking appliance emissions of NO<sub>2</sub> were not measured. The citations fail this test for one or more of the following reasons:

- Incremental contribution of natural gas cooking appliance emissions was not controlled relative to other sources of NO<sub>2</sub>, chiefly involving outdoor air concentrations.
- Other known asthma or respiratory illness agents were not measured or controlled for.
- Cooking activity patterns were not included in emissions associations and concentration data, typically relating to 24-hour exposure durations and longer.
- Potential exposures of subjects, specifically kitchen exposures during cooking events, were not accounted for.
- Comparisons to electric cooking did not account for covariant factors affecting either airborne contaminants or health effects, which would have required controlling for socio-economic status, location background air quality, and other factors, including other known agents of asthma development and respiratory illness, as discussed above.
- Cooking process emissions, most notably the concentrations of fine and ultra-fine particulates known for causing respiratory distress, were not measured or otherwise included in the studies.
- Underlying health conditions (absent of the influence of cooking activities) and symptoms were not diagnosed by qualified professionals but were self-reported.

A commentary on the Lin et. al. paper, cited by RMI, notes further limitations of the meta-analysis's causative associations: "The risk estimates studies included in the meta-analysis by Lin et al. were those adjusted for asthma risk factors, but it is not described which these were, apart from smoking in the household. In any case, it is hard to disentangle the effects of strongly associated indoor factors and housing quality through traditional confounder adjustment."<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Martine Vrijheid, "Commentary: Gas cooking and child respiratory health—time to identify the culprits?," International Journal of Epidemiology, Volume 42, Issue 6, December 2013, https://doi.org/10.1093/ije/dyt189

# Claim 6. Lower-income households may be at higher risk of gas stove pollution exposure.

Socio-economic disparities can lead to disparate outcomes for energy poverty, health, and other factors. However, the cited materials do not support the claim that "lowerincome households may be at higher risk of gas stove pollution exposure." The association of socio-economic factors to asthma and other respiratory illnesses and gas cooking is often missing from the cited sources. Where covered, sources lack control of science-based causes of asthma in these populations and make an error of using the "presence" of gas cooking appliances or general ambient air quality sources of contaminants as a proxy for exposure to combustion products from indoor sources. One study using a survey approach found that the use of unventilated gas cooking equipment (the "stove") as a heat source-a practice that the CPSC and other organizations specifically identify to be avoided—is associated with the increased the odds of respiratory illness. One study indicated that the presence of a gas stove and the use of a space heater or oven/stove for heat were independently associated with higher NO<sub>2</sub> concentrations; however, the authors note that the effects of indoor NO<sub>2</sub> concentrations on asthma symptoms may be misestimated because personal monitoring of exposure was not included in the study. One study set out to develop an analytical basis for understanding the role of combustion emission from gas cooking appliances; the study is too opaque to develop firm conclusions. Details on the relevant studies follow:

The Adamkiewicz, et. al., study refers to gas stove cooking among a number • of indoor and outdoor sources contributing to low-income population "exposures" to PM<sub>2.5</sub> and NO<sub>2</sub>. The authors write that "indoor concentrations of airborne pollutants may be driven by the design or condition of the home's physical structure; resident behaviors; product use profiles; characteristics of household furnishings; presence, condition, and use of mechanical ventilation; air infiltration pathways (especially in multi-family settings); and outdoor pollutant concentrations." The study provides no descriptions of specific respiratory system impacts. The study uses "literature" values for source rates of pollutants to model steady-state exposure concentrations using a simplistic box model for single-family occupancies and the National Institute of Standards and Technology (NIST) CONTAM model for multi-family structures. None of the modeling or initial conditions are provided. Gas cooking appliance and smoking results are conflated in observations of particulate matter concentrations from indoor sources, while the use of gas cooking appliances for supplemental space heating—a practice that the CPSC and other organizations specifically identify should be avoided—is identified as a source of elevated NO<sub>2</sub> levels. Much of the study identifies additional analytical and research needs, the study itself being highly opaque in developing qualitative statements. A more detailed review of the methods used and quantitative

results is warranted before policies regarding gas cooking can be extrapolated.<sup>14</sup>

- The Hansel, et. al. study uses an interviewer-administered questionnaire to assess housing characteristics and potential sources of indoor NO<sub>2</sub> concentrations. A self-reported time-activity diary to track household activities correlated with NO<sub>2</sub> concentrations. Indoor-air sampling for NO<sub>2</sub> and PM<sub>2.5</sub> was conducted during a 72-hour study period. The authors note that the link between indoor NO<sub>2</sub> concentrations and respiratory symptoms is not corroborated with objective data on pulmonary function. Furthermore, the study did not include any personal monitoring of exposure. The study only indicates the presence of a gas stove and the use of a space heater or a stove/oven for space heating. The study does not differentiate between the use of a space heater or a stove/oven for heat—the latter being a practice that the CPSC and other organizations specifically identify to be avoided.<sup>15</sup>
- Breysse et. al. provides a study review of studies. Information presented related to unvented gas stoves reference the Hansel et. al. (2008) article that was previously addressed.<sup>16</sup>
- The Pacheco, et. al. study reviewed a broad range of asthma exacerbation factors but did not include even the presence of gas cooking appliances as a causative factor. Where gas cooking appliances were installed, simple recommendations for performing maintenance were given, but these were not associated with the asthma triggers by the investigators. No airborne emissions from combustion (from either outdoor or indoor sources) were measured or inferred.<sup>17</sup>
- The Zahran, et. al. study presents a detailed review of childhood asthma in 2016 but presents no information or conclusions about cooking appliances or combustion appliances operation as a "trigger" for asthma development or

<sup>&</sup>lt;sup>14</sup> Gary Adamkiewicz et al., "Moving Environmental Justice Indoors: Understanding Structural Influences on Residential Exposure Patterns in Low-Income Communities," American Journal of Public Health. 2011, https://www.ncbi.nlm.nih.gov/pubmed/21836112#.

<sup>&</sup>lt;sup>15</sup>Nadia N Hansel et al., "A Longitudinal Study of Indoor Nitrogen Dioxide Levels and Respiratory Symptoms in Inner-City Children with Asthma," Environmental Health Perspectives Volume 116 Number 10, October 2008, p. 1430, https://ehp. niehs.nih.gov/doi/10.1289/ehp.11349.

<sup>&</sup>lt;sup>16</sup> Patrick N. Breysse et al., "Indoor Air Pollution and Asthma in Children," Proceedings of the American Thoracic Society Volume 7 Issue 2, 2010, p. 104, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3266016/

<sup>&</sup>lt;sup>17</sup> Christina M. Pacheco et al., "Homes of low-income minority families with asthmatic children have increased condition issues," Allergy and Asthma Proceedings, 2014, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4210655/#!po=78.0000.

asthma attacks.18

- The Katz article focuses on racial disparities among the population of citizens subjected to respiratory illness and asthma exacerbation associated with particulate emissions and discussed in other articles but states no observations regarding indoor air or combustion appliances as sources.<sup>19</sup>
- The Hernandez and Bird article use detailed sociological and public health qualitative interview data to demonstrate that energy poverty is more pervasive, and results in a greater energy burden for low-income tenants. There are no observations regarding indoor air or combustion appliances as sources.<sup>20</sup>
- The Coker paper presents a review of the National Health and Nutrition Examination Survey (1988-1994) to examine an association between respiratory infections (pneumonia and cough) in children and behaviors related to the use of an unventilated gas stove for heat—a practice that the CPSC and other organizations specifically identify to be avoided. The study made no measurements of emissions or exposure estimates, and health conditions were self-reported.<sup>21</sup>
- The Colton et al. paper presents a comparative study of environmental sampling within conventional and "green" low-income multi-family homes. Environmental measurements were not associated with specific sources within the homes. The contributions to emission product concentrations from specific housing conditions such as the presence of a gas or electric stove were not determined and undistinguished from policies to restrict smoking, building and ventilation design, and implementation of integrated pest management.
- The Guarnieri and Balmes paper is a literature review covering a five-year period prior to publication on overall airborne contaminants associated with respiratory illness and asthma development and exacerbation, but it makes no reference to

<sup>&</sup>lt;sup>18</sup> Hatice S. Zahran et al., Vital Signs: Asthma in Children – United States, 2001 – 2016, Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, February 9, 2018, http://dx.doi.org/10.15585/mmwr.mm6705e1

<sup>&</sup>lt;sup>19</sup> Cheryl Katz, "People in Poor Neighborhoods Breathe More Hazardous Particles," Scientific American, November 2012, https://www.scientificamerican.com/article/people-poorneighborhoods-breate-more-hazardousparticles/

<sup>&</sup>lt;sup>20</sup> Diana Hernández and Stephen Bird, Energy Burden and the Need for Integrated Low-Income Housing and Energy Policy, Poverty Public Policy, November 2010, p. 6, https://www.ncbi.nlm.nih. gov/pubmed/27053989

<sup>&</sup>lt;sup>21</sup> Eric S Coker et al., "A cross sectional analysis of behaviors related to operating gas stoves and pneumonia in US children under the age of 5," BMC Public Health, February 4 2015, https://www. ncbi.nlm.nih.gov/pubmed/25648867

indoor air quality issues in isolation from overall ambient air quality. The paper makes no observations or conclusions regarding indoor sources of contaminants of health concern, including use of unvented combustion appliances

• Wilhelm et al. examine outdoor pollution and associations with asthma. No information is presented related to cooking appliances.<sup>22</sup>

### Claim 7. Ventilation is critical but is not the sole strategy to prevent exposure.

RMI presents several arguments that call attention to the issues of *residential cooking*, not gas cooking *per se*. If exhaust hoods are not the solution for everyone, then <u>RMI is</u> <u>effectively arguing against residential cooking using cooktops and ovens, regardless of energy source.</u>

Most residential cooking ranges, such as ovens, cooktops, and combinations, are design certified to operate without outdoor exhaust systems, add-on exhaust hoods, or requirements for exhaust. No model codes require outdoor exhaust systems for residential cooking appliances.

Most states and local jurisdictions allow the installation of unvented combustion heating appliances. Also, all dryers—not just gas dryers—are "exhausted," not "vented," to remove moisture from homes, as moisture from dryers is a major source of diminished indoor air quality. (RMI interprets the International Fuel Gas Code incorrectly; it does not cover the "venting" of stoves.)

All research on exhaust hoods is justified based upon the mitigation of cooking effluent accumulation as the principal benefit. Removal of combustion products from gas cooking appliances is incidental by comparison. The control of cooking effluent is the central purpose of a range hood. A properly-designed and installed recirculating range hood to achieve high "capture" and filtration would accomplish the principal goal of the range hood. The efficient capture of cooking effluent can be a significant shortcoming of all residential range hoods (true for exhausted to the outdoors and recirculating hoods) and has been the focus of research. Model codes and standards may be insufficient in this respect.

#### Claim 8. Electric cooking is a cleaner household cooking option.

A focus on electrification as a strategy to address indoor air quality would not address several emissions products and concerns, could be counterproductive in terms of reducing specific pollutants like particulate matter, and could place burdensome costs on many consumers.

<sup>&</sup>lt;sup>22</sup> Michael Guarnieri and John R. Balmes, "Outdoor air pollution and asthma," Lancet, May 3 2014, p. 8, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4465283/

Studies have consistently found that emissions from the cooking process—not from the burner or heat source operation—represent the chief source of concern concerning indoor air quality. RMI's contention that electric stoves are inherently cleaner than gas stoves is based solely on claims related to potential NO2 emissions and ignores other emission products that can result from cooking with any fuel source. These products of cooking effluent are widely known and have been extensively documented for both residential and commercial cooking. As shown in literature reviews, specific pollutants may include particulates ranging down to ultrafine particulates, vapors, and particle-associated organic compounds, including polycyclic aromatic hydrocarbons (PAH) as well as heterocyclic amines, and toxic gases such as formaldehyde, acetaldehyde, and acrolein.<sup>23</sup>

Beyond emissions from the cooking process, a key consideration regarding indoor air quality and residential cooking is the association of emissions from the cooking of fats and oils. These emissions can include particulates, vapors, particle-associated organic compounds, as well as toxic gases. Furthermore, indoor environments can affect levels of individual exposures are also shaped by factors like the design of a building, insulation, room arrangement, outdoor infiltration, other combustion devices, and cooking methods and ingredients.<sup>24</sup>

Additionally, poorer heat control of electric cooktops associated with continued conductive heating from coil elements and inability to spontaneously cool these elements has been shown anecdotally to increase cooking process emissions such as greater volatilization of fats and oils and particulate generation compared to gas cooktops, where heating control is more immediate.

<u>Contact</u> Richard Meyer Managing Director Energy Markets, Analysis, and Standards American Gas Association

Ted Williams Senior Director, Codes and Standards American Gas Association

<sup>&</sup>lt;sup>23</sup> Abdullahi, L., Delgado S., Juana M., Harrison, R., "Emissions and Indoor Concentrations of Particulate Matter and Its Specific Chemical Components from Cooking: A Review," Atmospheric Environment, vol. 41, pp. 260-294, June 2013.

<sup>&</sup>lt;sup>24</sup> Ibid.



June 13, 2023

Members of the Legislative Assembly:

We write today to express our opposition to HB 3409 and to request your no vote on the legislation. HB 3409 is an omnibus environmental policy bill that contains the provisions of as many as 14 previously introduced policy bills. Our concerns regarding this bill are multifold.

First, the 122-page amendment incorporating the more than dozen bills into HB 3409 was made available to the Natural Resources Subcommittee with the bare minimum notice required, leaving minimal time for members of the public and impacted stakeholders to review the language and provide meaningful public feedback. While some of the policies contained in the bill received public hearings in other venues earlier this session, many others received only cursory vetting, are highly controversial in nature, and pose significant challenges to employers and consumers alike. We trust that you share our concern that proposed policy changes of this magnitude must receive a thorough review from legislative committees, members of the public, and stakeholders before advancing through the legislative process. Unfortunately, that has not been the case with HB 3409.

Second, as previously mentioned, many of the provisions of HB 3409 are highly controversial in nature and present a myriad of potential consequences for Oregon employers and consumers. Language related to the regulation of residential and commercial building codes, for example, has consistently been opposed by union trade organizations, housing providers, and the building industry. The bill also contains language updating Oregon's greenhouse gas reduction goals, among other related changes, that have significant public policy implications. Other provisions of the bill enjoy some level of industry support, but would be better handled as a stand-alone policy bill. We implore you to reject the omnibus approach being taken in HB 3409 and instead consider the merits of each of these bills as standalone policies. Our organizations stand ready to participate in these conversations through the remainder of this year's regular session, a potential special session, or in the 2024 legislative session. However, we are unified in our opposition to the approach currently being taken in HB 3409.

In summation, while we recognize the 2023 legislative session has been unprecedented and that adjournment grows closer by the day, we urge you to avoid rushing through major policy changes without adequate feedback from the public, industry experts, and impacted stakeholders.

Please vote NO on HB 3409 to address these concerns and allow for each of these policies to receive the scrutiny and stand-alone votes they deserve.

For more information, please contact: Sharla Moffett (OBI) or Scott Bruun (OBI) ------ Forwarded Message ------From: Kurt Swanson <<u>info@nwenergychoice.org</u>> Date: On Friday, March 10th, 2023 at 4:00 PM Subject: Oregon Introduces Legislation that Threatens Energy Choice

## NW Coalition for Energy Choice

### Oregon House Climate, Energy & Environment Committee Taking Up Legislation Limiting Home Energy Choice

On Monday, March 13th at 3pm, the Oregon legislature will be hearing a bill that will harm our most vulnerable residents. HB 3152 will restrict incentives or subsidies for Oregon residents to purchase gas appliances. It will also end the funds being used for gas lines in residential buildings to support the flow of natural gas.

Low-income residents depend on these funds in order to heat their homes in the winter and HB 3152 will make it impossible for natural gas to remain affordable and dependable for many Oregonians - especially our most vulnerable populations.

### Please send a pre-written message to the Oregon House Committee on House Committee On Climate, Energy, and Environment, urging them to OPPOSE this harmful legislation.

### TAKE ACTION

f

### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO.:UG-461REQUESTER:Env'tl GroupsTYPE:Data RequestREQUEST NO.:EG - 22

DATE PREPARED:5/16/2023WITNESS:Kaylene SeRESPONDER:Joel AnderDEPT:RegulatoryTELEPHONE:(509) 495-EMAIL:joel.anders

Kaylene Schultz Joel Anderson Regulatory Affairs (509) 495-2811 joel.anderson@avistacorp.com

### **REQUEST:**

Please state whether Avista Utilities seeks reimbursement for industry association dues from ratepayers, and please describe your justification for recovering these costs from ratepayers.

### **RESPONSE:**

A portion of the costs associated with association dues are removed from revenue requirement in adjustment 3.01 Membership and Dues. This adjustment is provided in the Company's response to EG\_DR\_021 Attachment A. Tab "M&D-2" shows what portion of dues are included in revenue requirement and what portion is removed based on the type of membership. Also included on tab "M&D-2" is a narrative of why some costs are included.



### Native Excel Spreadsheet

321 Staff\_DR\_057 Attachment A\_EXCERPTS\_Other Association Expenses.xlsx

354 - Gas Compliance			Airfare, Southwest 5262150308629, Airfare for AGA Bes		Non-Labor	599.97	187.57
354 - Gas Compliance			Conference, Registration for AGA Best Practice - Compl		Non-Labor	645	201.65
354 - Gas Compliance			Airfare, Delta 0062313461899, Spring AGA - OSRAC Me		Non-Labor	977.2	305.51
			Lodging, Conference lodging AGA PSMS Workshop	Employee Exper 230 Employee Lodging		582.66	182.16
			Airfare, Alaska 0272307717820, AGA Tulsa in October	Employee Exper 205 Airfare	Non-Labor	766.19	239.54
			Seminar, AGA Tulsa In October	Voucher 950 Training	Non-Labor	645 128.57	201.65
354 - Gas Compliance 354 - Gas Compliance			Meals, AGA - OSRAC Meeting Indianapolis Cab Fare, AGA - OSRAC Meeting Indianapolis	Employee Exper 215 Employee Business Employee Exper 235 Employee Misc Exp		128.57	31.85
			Parking, AGA - OSRAC Meeting Indianapolis Parking, AGA - OSRAC Meeting Indianapolis			36	11.20
			Airfare, Southwest 5261493509327, Flight to/From AGA	Employee Exper 235 Employee Misc Exp Employee Exper 205 Airfare	Non-Labor	609.96	190.7
		Gas Integrity Mgt Program	Conference, Conference Fee for AGA Spring Committee		Non-Labor	995	311.08
		Gas Integrity Mgt Program Gas Integrity Mgt Program	Conference, Conference Fee for AGA Spring Committee		Non-Labor	995	311.0
354 - Gas Compliance		Gas Integrity Mgt Program	Airfare, Southwest 5261493509046, Flight to AGA Spring		Non-Labor	609.96	190.7
08 - Operations Support		Gas Control Room comp	ASHLEY CALLISON-AMERICAN GAS ASSOCIATION	Voucher 830 Dues	Non-Labor	226	70.66
		ET Admin Common All	Airfare, Alaska WHVNRY, AGA / TSA WA DC Meeting	Employee Exper 205 Airfare	Non-Labor	568.6	51.6
			Airfare, American 0012420183393, AGA Conference	Employee Exper 205 Airfare	Non-Labor	1,202.59	109.10
		ET Admin Common All	Lodging, AGA / TSA Meeting	Employee Exper 230 Employee Lodging		593.48	53.8
			Airfare, AGA Mgmt Ops Meeting	Employee Exper 205 Airfare	Non-Labor	923.2	83.
109 - Office of CIO		ET Admin Common All	Conference, AGA / TSA Meeting		Non-Labor	325	29.
		ET Admin Common All	Meals, AGA / TSA Meeting	Employee Exper 215 Employee Business		35.1	3.1
		Employment 099 CM	ASHLEY CALLISON-AMERICAN GAS ASSOCIATION	Voucher 830 Dues	Non-Labor	202	18.3
		Treasury Activities-099	DEBBIE DEUBEL-AMERICAN GAS ASSOCIATION		Non-Labor	985	89.4
		ET Admin Common All	Parking, AGA / TSA Meeting	Employee Exper 225 Conference Fees Employee Exper 235 Employee Misc Exp		985	2.1
			Conference, AGA Conference		Non-Labor	1.495	135.
		Analysts Meetings	Lodging, AGA Financial Conference	Employee Exper 225 Conference Fees Employee Exper 230 Employee Lodging		725.04	65.8
			ASHLEY CALLISON-AMERICAN GAS ASSOCIATION	Voucher 830 Dues	Non-Labor	416	38.7
055 - Natural Gas Resources			ASHLEY CALLISON-AMERICAN GAS ASSOCIATION	Voucher 830 Dues	Non-Labor	179	16.2
		Analysts Meetings	Meals, AGA Financial Conference meal 3 people	Employee Exper 215 Employee Business		95.64	8.6
		Analysts Meetings	Meals, AGA Financial Conference	Employee Exper 215 Employee Business		51.19	4.6
		Analysts Meetings	Meals, AGA Financial Conference meal 4 people	Employee Exper 215 Employee Business		563.1	51.1
01 - Exec Administration	09900010	Analysts Meetings	Meals, AGA Financial Conference meal for 4 people	Employee Exper 215 Employee Busines	Non-Labor	639.81	58.0
S20 - Director of Finance	09903370	Treasury Activities-099	Lodging, Hotel stay for AGA Financial Conference	Employee Exper 230 Employee Lodging	Non-Labor	725.04	65.8
99 - IT Director	09905733	ET Admin Common All	Airfare, United GTZN8X, AGA / TSA WA DC Meeting	Employee Exper 205 Airfare	Non-Labor	498.6	45.2
109 - Office of CIO	09905733	ET Admin Common All	Meals, AGA / TSA Meeting	Employee Exper 215 Employee Business	Non-Labor	68.38	6.2
109 - Office of CIO	09905733	ET Admin Common All	Cab Fare, AGA / TSA Meeting	Employee Exper 235 Employee Misc Exp		36.39	3.3
54 - Strategic Corp Develop			DEBBIE DEUBEL-AMERICAN GAS ASSOCIATION	Employee Exper 225 Conference Fees		985	89.4
02 - Compensation & Analy			WTW AGA Survey Participation & Results	Voucher 885 Miscellaneous	Non-Labor	1,300	11
			Airfare, Southwest 5262127947605, Flight to California f		Non-Labor	345.96	31.
			Parking, Parking During AGA Legal Conference	Employee Exper 235 Employee Misc Exp		60	5.4
			Lodging, Hotel for AGA Legal Conference	Employee Exper 230 Employee Lodging		1,533.92	139.24
			Meals, Meals During AGA Legal Conference	Employee Exper 230 Employee Eddging Employee Exper 215 Employee Busines		147.13	13.3
			Car Rental, Car Rental for AGA Legal Conference			420.46	38.1
				Employee Exper 220 Employee Car Ren			
02 - Labor Relations		A and G Common Training	Cab Fare, Uber to Class on Wednesday for AGA Leader			18.66	1.
		A and G Gas Training	Cab Fare, AGA Conference	Employee Exper 235 Employee Misc Exp		72.48	22.6
		A and G Common Training	Cab Fare, Uber to Hotel from Airport for AGA Leadership			29.19	2.6
		A and G Common Training	Airfare, AGA Conf	Employee Exper 205 Airfare	Non-Labor	565.95	51.3
		A and G Gas Training	Airfare, AGA Conference	Employee Exper 205 Airfare	Non-Labor	689.6	215.
02 - Labor Relations	09902811	A and G Common Training	Airfare, Delta HNI3K7, Flight from WA DC to Spokane co	Employee Exper 205 Airfare	Non-Labor	448.6	40.7
C39 - Security Director	09902811	A and G Common Training	Cab Fare, AGA Conf	Employee Exper 235 Employee Misc Exp	Non-Labor	117.37	10.66
02 - Labor Relations	09902811	A and G Common Training	Airfare, Alaska GGCACT, Flight to WA DC for AGA Lead	Employee Exper 205 Airfare	Non-Labor	401.6	36.4
E01 - Exec Administration	09902812	A and G Gas Training	Meals, AGA Conference	Employee Exper 215 Employee Business	Non-Labor	14.58	4.56
39 - Security Director	09902811	A and G Common Training	Meals, AGA Conf	Employee Exper 215 Employee Business		224.91	20.
01 - Exec Administration		A and G Gas Training	Parking, AGA Conference	Employee Exper 235 Employee Misc Exp		48	15.0
		A and G Common Training	Lodging, Thompson Hotel for time in WA DC for AGA Le			1,558.72	141.4
		A and G Common Training	ATHENA ALLEN-AMERICAN GAS ASSOCIATION	Voucher 830 Dues	Non-Labor	1,395	126.6
39 - Security Director		A and G Common Training	Parking, AGA Conf	Employee Exper 235 Employee Misc Exp		60	5.4
		A and G Common Training	KAREN LORENZ-AMERICAN GAS ASSOCIATION		Non-Labor	1,380	128.4
		A and G Common Training	Payment/reimbursement to Avista for personal		Non-Labor	-85	-7.9
or - La Junty Accounting	00002011	A and G common training	registration of my sister to attend the 2021 AGA Fall Acc Conference that was paid on Dept CC.		NON-LADOI	-00	-1.9
01 - Exec Administration	09902812	A and G Gas Training	Lodging, AGA Conference	Employee Exper 230 Employee Lodging	Non-Labor	918.84	287.27
39 - Security Director		A and G Common Training	Lodging, AGA Conf	Employee Exper 230 Employee Lodging		1,165.32	105.7
02 - Labor Relations		A and G Common Training	Cab Fare, Uber to Class on Tuesday for AGA Leadershi	Employee Exper 235 Employee Misc Exp		9.25	0.8
		A and G Common Training	Conference, AGA Conf		Non-Labor	795	72.1
51 - Gas Engineering			Airfare, Delta GREOBI, Airfare for Spring 2022 AGA Cor		Non-Labor	737.2	230.4
51 - Gas Engineering			Meals, Meal while traveling to AGA Conference	Employee Exper 215 Employee Business		47.53	14.8
			Parking, AGA Operations Conference	Employee Exper 235 Employee Misc Exp		47.55	26.2
			Lodging, AGA Executive Conference	Employee Exper 230 Employee Lodging		418.68	130.
51 - Gas Engineering			Conference, Registration for AGA Conference	Employee Exper 225 Conference Fees		1,495	467.
			Lodging, AGA Committee Meeting	Employee Exper 230 Employee Lodging		291.33	91.08
354 - Gas Compliance			Airfare, United 0162405737207, Airfare for AGA Peer Re		Non-Labor	1,037.2	324.27
			Meals, Meal while traveling back from AGA Conference	Employee Exper 215 Employee Busines		24.07	7.53
	09900311	Gas - Trade/Professional Ass	Meals, Dinner - Travel back from Bismarck for AGA Peer	Employee Exper 215 Employee Business	Non-Labor	24.75	7.74
			Meals, Dinner - Bismarck for AGA Peer Review	Employee Exper 215 Employee Business		35.06	10.96

Environmental Groups calculation of OR and AA allocated totals to Gas South
14,753.62 AGA
1,414.76 NWGA
7,224.97 WEI
2,889.95 EEI
2,108.78 EEI/AGA joint
494.47 Unattributed "gas conference"
(Sums exclude general association dues, listed at rows 507-509)

U01 - Legal Staff	09900311		Training, AGA Next Level Leadership Registration. Two documents attached. Email to confirm registration is only receipt received, so also attached credit card statement	Voucher	950 Training	Non-Labor	3,600	1,125
			to show the registration.					
A81 - Medford Construction	09900311		Airfare, AGA Operations Conference	Employee Exper	205 Airfare	Non-Labor	455.58	142
354 - Gas Compliance			Meals, Lunch - Travel from AGA Conference, Josh Fort a			Non-Labor	71.36	22
354 - Gas Compliance			Parking, Airport Parking - Travel to AGA Conference, Jos				36	11
A81 - Medford Construction			Meals, AGA Operations Conference		215 Employee Busines:		166.12	51
A81 - Medford Construction			Lodging, AGA Operations Conference		230 Employee Lodging		1,531.4	478
E01 - Exec Administration			Mileage, AGA Board of Directors meeting and Financial I				19.54	6
B54 - Gas Compliance					235 Employee Misc Exp		30	9
E01 - Exec Administration			Airfare, AGA Executive Conference	Employee Exper		Non-Labor	277.6	86
E01 - Exec Administration							1.970	61
			DEBBIE DEUBEL-AMERICAN GAS ASSOCIATION		225 Conference Fees		22.73	7
B54 - Gas Compliance			Meals, Breakfast - Travel from AGA Conference, Josh Fo					
B51 - Gas Engineering			Meals, non-alcoholic drink at bar waiting for seat for dinn				6.51	2
B51 - Gas Engineering			Cab Fare, cab fare to hotel after dinner while at AGA Con				8.2	2
354 - Gas Compliance			Cab Fare, Uber - Bismarck for AGA Peer Review		235 Employee Misc Exp		15.01	4
A81 - Medford Construction			Airfare, Alaska 0272307619426, AGA Committee Meetin			Non-Labor	579.2	181
354 - Gas Compliance			Meals, Lunch - Travel to AGA Conference		215 Employee Busines:		21.82	e
351 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Parking, parking at airport outside while at AGA Conference	Employee Exper	235 Employee Misc Exp	Non-Labor	30	g
E01 - Exec Administration	09903691	Corporate Planning-099	Conference, 2022 AGA Executive Conference	Employee Exper	225 Conference Fees	Non-Labor	995	90
351 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Lodging, Hotel room while working out of town at 2-day A	Employee Exper	230 Employee Lodging	Non-Labor	582.66	182
E01 - Exec Administration	09900311	Gas - Trade/Professional Ass	Lodging, AGA Financial Forum and Board meeting in Mia	Employee Exper	230 Employee Lodging	Non-Labor	1,132.62	35
351 - Gas Engineering			Conference, Registration fee for Spring 2022 AGA Comr				1,495	46
354 - Gas Compliance			Meals, Lunch- New Orleans AGA Conference		215 Employee Busines		19.74	6
354 - Gas Compliance			Cab Fare, Lyft - Bismarck for AGA Peer Review		235 Employee Misc Exp		16.69	6
354 - Gas Compliance			Lodging, Hotel - AGA Spring Committee Meetings		230 Employee Lodging		1,531.4	478
B51 - Gas Engineering			Meals, Meal while at AGA Conference		215 Employee Busines:		17.68	5
A81 - Medford Construction			Cab Fare, AGA Operations Conference		235 Employee Misc Exp		170.8	53
B54 - Gas Compliance			Cab Fare, Cab - Bismarck for AGA Peer Review		235 Employee Misc Ext 235 Employee Misc Ext		24.5	7
						Non-Labor		
G51 - Dir of Natural Gas			Airfare, Alaska BROHIJ, AGA PSMS Workshop	Employee Exper			516.2	161
E01 - Exec Administration			Meals, AGA Financial Forum and Board meeting in Mian		215 Employee Busines:		98.56	30
354 - Gas Compliance			Meals, Dinner - AGA Conference, Josh Fort and Dylan K		215 Employee Busines:		77.7	24
354 - Gas Compliance			Meals, Lunch - Bismarck for AGA Peer Review		215 Employee Busines:		29.45	g
A81 - Medford Construction			Conference, AGA Committee Meeting	Employee Exper	225 Conference Fees	Non-Labor	795	248
B51 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Meals, Lunch while traveling to AGA Conference	Employee Exper	215 Employee Business	Non-Labor	15.97	4
B51 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Lodging, Lodging for Spring 2022 AGA Committee and C	Employee Exper	230 Employee Lodging	Non-Labor	1,717.34	536
B51 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Lodging, 4 nights at hotel while at AGA Conference		230 Employee Lodging	Non-Labor	1,127.66	352
351 - Gas Engineering			Airfare, baggage fee while traveling back from AGA Cont	Employee Exper		Non-Labor	30	g
B54 - Gas Compliance			Meals, Dinner- New Orleans AGA Conference with cowo			Non-Labor	214.28	
B51 - Gas Engineering			Airfare, Delta 0067698146279, Flight to New Orleans for			Non-Labor	737.2	230
G51 - Dir of Natural Gas			Conference, AGA PSMS Workshop			Non-Labor	995	311
B51 - Gas Engineering			Airfare, Alaska 0272305957861, Airfare for Fall 2022 AG			Non-Labor	277.2	86
B51 - Gas Engineering			Conference, Registration Fee for Fall 2022 AGA PMC Co			Non-Labor	795	248
			Conference, AGA Operations Conference			Non-Labor	1,495	46
							608	190
B54 - Gas Compliance			Lodging, Hotel for AGA Peer Review - MDUG Bismarck,		230 Employee Lodging			136
B54 - Gas Compliance	09900311	Gas - Trade/Professional Ass	Lodging, AGA - OSRAC Meeting Indianapolis		230 Employee Lodging		436.41	
B51 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Meals, meal while traveling back from AGA Conference		215 Employee Busines:		28.14	
B54 - Gas Compliance			Meals, Lunch - Travel to Bismarck for AGA Peer Review		215 Employee Busines:		24.1	7
B54 - Gas Compliance			Lodging, Lodging- New Orleans AGA Conference		230 Employee Lodging		1,531.4	478
E01 - Exec Administration			DEBBIE DEUBEL-AMERICAN GAS ASSOCIATION		225 Conference Fees		900	281
B51 - Gas Engineering	09900311	Gas - Trade/Professional Ass	Tips, cash tips throughout stay at AGA Conference	Employee Exper	235 Employee Misc Exp	Non-Labor	6	1
303 - Director of Clean Energy	09902454	Gas Resource Expense	Parking, NWGA Energy Conf	Employee Exper	235 Employee Misc Exp	Non-Labor	36	11
D55 - Natural Gas Resources	09902454	Gas Resource Expense	Conference, NWGA - Annual Energy Conference - Mem	Employee Exper	225 Conference Fees	Non-Labor	350	109
B03 - Director of Clean Energ	09902454	Gas Resource Expense	Airfare, NWGA Energy Conf	Employee Exper	205 Airfare	Non-Labor	25	7
303 - Director of Clean Energ			Lodging, NWGA Energy Conf		230 Employee Lodging	Non-Labor	483.1	151
B03 - Director of Clean Energ			Meals, NWGA Energy Conf		215 Employee Busines:		104.88	32
B03 - Director of Clean Energ			Car Rental, NWGA Energy Conf		220 Employee Car Ren		207.66	64
303 - Director of Clean Energ			Conference, NWGA Energy Conf			Non-Labor	350	109
303 - Director of Clean Energ			Airfare, Alaska UFGMWL, NWGA Energy Conf	Employee Exper		Non-Labor	410.21	128
D55 - Natural Gas Resources			Misc, NWGA - Networking event		235 Employee Misc Exp		150	120
555 - Natural Gas Resources								
			Lodging, NWGA AEC 2022		230 Employee Lodging		662.02	206
			Meals, Dinner at Sun River during NWGA conference		215 Employee Business		55.75	55
			Lodging, NWGA Energy Conference resort room		230 Employee Lodging		241.55	21
			Mileage, Travel to Sun River for NWGA meeting		210 Employee Auto Mile		95.94	29
		Regional Business Policy OR			210 Employee Auto Mile		177.84	177
			Lodging, NWGA Annual Conference lodging	Employee Exper	230 Employee Lodging	Non-Labor	483.1	151
F52 - Key Bus. Customer Acc	09905544	Gas Trade Prof Org All State:	Conference, NWGA Annual Conference	Employee Exper	225 Conference Fees	Non-Labor	350	109
E55 - Power Supply	09902454	Gas Resource Expense	Misc, Gas rental car - Western Energy Institute Energy M	Employee Exper	235 Employee Misc Exp	Non-Labor	33.33	10
E55 - Power Supply	09902454	Gas Resource Expense	Airfare, Alaska 0272135474702, WEI Energy Manageme	Employee Exper		Non-Labor	313.98	98
		OR-Renewable Natural Gas I	MICHAEL WHITBY-WESTERN ENERGY INSTITUTE	Voucher	950 Training	Non-Labor	449	
ESS - Power Supply								
E55 - Power Supply E55 - Power Supply	09902454	Gas Resource Expense	Conference, WEI Energy Management Virtual Conference	Employee Exper	225 Conference Fees	Non-Labor	199	62

TEE Davies Overally		Gas Resource Expense	And a Mastern Energy Institute Energy Management I	Employee Exper 235			48	15.0
		Gas Resource Expense	Meais, western Energy Institute Energy Management Me	Employee Exper 215			19.64	6.1
		Gas Resource Expense	Lodging, Western Energy Institute Energy Management	Employee Exper 230			460.82	144.0
E55 - Power Supply	09902454	Gas Resource Expense	Airfare, Southwest 5262106622819, WEI Energy Manag-	Employee Exper 205	Airfare	Non-Labor	88.98	27.8
209 - Project Management	09902811	A and G Common Training	Contract Labor - Weishaar. Jacob - 2022-04-04 to 2022-	Contractor 035	Workforce - Contra	Non-Labor	59.23	5.3
/08 - Real Estate	09900162	Admin Activities-Common to	Notary Stamp Luann Weingart	Contractor 010	General Services	Non-Labor	34.5	3.1
.51 - Claims	09903410	Risk Mgmt Admin Activity-099	Meals, Meal during WEI Conference	Employee Exper 215	Employee Business	Non-Labor	70.18	6.3
.51 - Claims	09903410	Risk Mgmt Admin Activity-099	Mileage, Travel to Portland, OR for WEI Conference (od	Employee Exper 210	Employee Auto Mile	Non-Labor	270	24.
		Risk Mgmt Admin Activity-09	Mileage Travel to Liberty Lake WA following WELConfe	Employee Exper 210			278.75	25.
.51 - Claims		Risk Mgmt Admin Activity-09	Lodging, Hotel during WELConference	Employee Exper 230			520.24	47.2
R02 - COVID Response		Gen Safety/Health Admin-09		Employee Exper 230 Employee Exper 230			373.1	33.8
R02 - COVID Response		Gen Safety/Health Admin-099	Mileage, WEI	Employee Exper 210			128.7	11.6
		Gen Safety/Health Admin-09	JENIFER PEARSON-WESTERN ENERGY INSTITUTE	Employee Exper 225			799	72.5
		Admin Activities-Common to	IRWA Membership renewal Luann Weingart			Non-Labor	235	21.3
		ET Admin Common All	Conference, Planning member for WEI session.	Employee Exper 225			199	18.0
C59 - Enterprise Busi Continu			Meals, WEI ERAP Meeting Dinner	Employee Exper 215	Employee Busines:	Non-Labor	35.66	3.2
59 - Enterprise Busi Continu	09902811	A and G Common Training	Parking, Spokane airport parking while at WEI ICS confe	Employee Exper 235	Employee Misc Exp	Non-Labor	24	2.1
101 - Legal Staff	09902811	A and G Common Training	Airfare, Alaska BUKZOJ, Round-trip flights to Portland fo	Employee Exper 205	Airfare	Non-Labor	198	17.9
53 - Con. Ctr-Lewiston Billin			Parking, Airport Parking / WEI trip	Employee Exper 235	Employee Misc Ext	Non-Labor	36	3.2
59 - Enterprise Busi Continu			Parking WEI parking	Employee Exper 235			30	2.7
		A and G Common Training				Non-Labor	1,298	117.8
			HEATHER WEBSTER-WESTERN ENERGT INSTITUTE					
054 - Corp & Subs Accountin	09902811	A and G Common Training	Airfare, Return flight for John from WEI Leadership	Employee Exper 205	Amare	Non-Labor	119	10.
			course trip, original ticket purchase at \$198.99 rebooked					
			at 119.00, both tickets attached					
259 - Enterprise Busi Continu			Conference, WEI ICS Immersive conference fees.	Employee Exper 225			699	63.4
		A and G Common Training	Meals, Dinner in Portland for Western Energy Institute co	Employee Exper 215			90.08	8.1
J01 - Legal Staff	09902811	A and G Common Training	Parking, Parking at Spokane Airport for Western Energy	Employee Exper 235	Employee Misc Exp	Non-Labor	32	2.9
054 - Corp & Subs Accountin	09902811	A and G Common Training	Leadership Development Program: WEI Business Acum	Voucher 950	Training	Non-Labor	4,699	437.3
054 - Corp & Subs Accountin			Lodging, Lodging at WEI course	Employee Exper 230		Non-Labor	563.38	51.1
50 - Contact Ctr - Spokane			Parking WELCustomer & Corporate Symposium Airport	Employee Exper 235			66	5.9
54 - Corp & Subs Accountin			Mileogo, Trevel to Spekene from WELCourse	Employee Exper 200 Employee Exper 210			244.53	22
			Willeage, Traver to Spokane Iron WEI Course					
59 - Enterprise Busi Continu			Conference, WEI ERAP Mtg	Employee Exper 225			499	45.2
54 - Corp & Subs Accountin			Lodging, lodging during WEI Leadership Course	Employee Exper 230			464.29	42.1
02 - HR/Comp/Labor & Emp			Conference, WEI HR Forum	Employee Exper 225			199	18.0
01 - Exec Administration	09902811	A and G Common Training	Conference, WEI Annual Meeting	Employee Exper 225	Conference Fees	Non-Labor	1,099	99.7
50 - Contact Ctr-Spokane C	09902811	A and G Common Training	DARRIN BELGARDE-WESTERN ENERGY INSTITUTE	Voucher 830	Dues	Non-Labor	799	72.5
101 - Legal Staff	09902811	A and G Common Training	Meals, Breakfast in Portland for Western Energy Institute	Employee Exper 215	Employee Busines	Non-Labor	30	2.7
59 - Enterprise Busi Continu			Conference, WEI Mutual Assistance Conference fees	Employee Exper 225			699	63.4
53 - Con. Ctr-Lewiston Billin			Meals WEL/Meal	Employee Exper 215			17.33	1.5
			Ledrice MCI Meter Assist Meeting				668.67	60.6
59 - Enterprise Busi Continu			Lodging, WEI Mutual Assist Meeting	Employee Exper 230				
101 - Legal Staff		A and G Common Training	Lodging, Lodging in Portland for Western Energy Institute	Employee Exper 230			863.43	78.3
53 - Con. Ctr-Lewiston Billin			Lodging, WEI / Hotel Stay	Employee Exper 230			1,032.32	93.
59 - Enterprise Busi Continu	09902811	A and G Common Training	Conference, WEI ICS Leadership	Employee Exper 225	Conference Fees	Non-Labor	349	31.6
59 - Enterprise Busi Continu	09902811	A and G Common Training	Lodging, hotel for WEI Meeting	Employee Exper 230	Employee Lodging	Non-Labor	114.85	10.4
99 - IT Director	09902811	A and G Common Training	Conference, WEI Conference Fee	Employee Exper 225	Conference Fees	Non-Labor	549	49.8
		A and G Common Training	LESLIE KOEP-WESTERN ENERGY INSTITUTE	Employee Exper 225		Non-Labor	1,099	99.7
59 - Enterprise Busi Continu			Airfare Round trip tickets for WEI Mutual Assistance Cor	Employee Exper 205		Non-Labor	207	18.7
55 - Enterprise Busi Contine		A and G Common Training	Alfare, WEL Conference			Non-Labor	540.6	49.0
			Alfare, WEI Conference	Employee Exper 205				
50 - Contact Ctr-Spokane C			Parking, WEI Customer and Corp Symposium - airport p	Employee Exper 235			48	4.3
		A and G Common Training	DARRIN BELGARDE-WESTERN ENERGY INSTITUTE			Non-Labor	2,397	217.5
054 - Corp & Subs Accountin	09902811	A and G Common Training	Mileage, Travel to Calgary for WEI Course	Employee Exper 210			244.53	22.
59 - Enterprise Busi Continu	09902811	A and G Common Training	Conference, WRMAA Annual Meeting - WEI	Employee Exper 225	Conference Fees	Non-Labor	699	63.4
59 - Enterprise Busi Continu	09902811	A and G Common Training	Training, WEI ICS Immersive	Voucher 950	Training	Non-Labor	599	54.3
02 - Corp Org Development	09902811	A and G Common Training	Leadership Development Program: WEI Business Acum	Voucher 950	Training	Non-Labor	4,699	426.5
		A and G Common Training	Cab Fare, Transportation from airport to hotel - WELCus	Employee Exper 235			67.71	6.1
		A and G Common Training	BRUSCHMEDDING-PELWELCLAS			Non-Labor	27.06	2.4
			Lodging, WEI Customer & Corporate Symposium 4 Nigh	Employee Exper 230			1,032.32	93
02 - HRIS/Payroll	00002914			Employee Exper 230		INCUL-LODOL		27.7
02 - HRIS/Payroll 50 - Contact Ctr - Spokane				Employee Every cont		Non Labor	200.0	27.7
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin	09902811	A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 205		Non-Labor	306.2	
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin	09902811 09902811	A and G Common Training A and G Common Training		Employee Exper 235	Employee Misc Exp	Non-Labor	46.65	
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C	09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230	Employee Misc Exp Employee Lodging	Non-Labor Non-Labor	46.65 779.4	70.7
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin	09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205	Employee Misc Ex Employee Lodging Airfare	Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6	70.7
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin	09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230	Employee Misc Ex Employee Lodging Airfare	Non-Labor Non-Labor	46.65 779.4	70.7
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205	Employee Misc Exp Employee Lodging Airfare Conference Fees	Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6	70.7 14.7 31.6
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 51 - Claims	09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225	Employee Misc Ext Employee Lodging Airfare Conference Fees Conference Fees	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349	70.7 14.7 31.6 45.2
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con, Ctr-Lewiston Billion 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 51 - Claims 01 - Legal Staff	09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 220	Employee Misc Ex Employee Lodging Airfare Conference Fees Conference Fees Employee Car Ren	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 499 257	70.7 14.7 31.6 45.2 23.3
12 - HRIS/Payroll       50 - Contact Ctr - Spokane       54 - Corp & Subs Accounting       53 - Con. Ctr-Lewiston Billin       50 - Contact Ctr-Spokane C       54 - Corp & Subs Accounting       59 - Enterprise Busi Continu       51 - Claims       01 - Legal Staff       54 - Corp & Subs Accounting	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 220 Employee Exper 215	Employee Misc Exp Employee Lodging Airfare Conference Fees Employee Car Ren Employee Business	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 499 257 72.66	70.7 14.7 31.6 45.2 23.3 6.5
102 - HRIS/Payroll       50 - Contact Ctr - Spokane       54 - Corp & Subs Accountin       53 - Con, Ctr-Lewiston Billin       50 - Contact Ctr-Spokane C       54 - Corp & Subs Accountin       59 - Enterprise Busi Continu       51 - Claims       51 - Claims       54 - Corp & Subs Accountin       55 - Corp & Subs Accountin       56 - Corp & Subs Accountin       57 - Corp & Subs Accountin       58 - Corp & Subs Accountin       53 - Con, Ctr-Lewiston Billin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 225 Employee Exper 225 Employee Exper 220 Employee Exper 220 Employee Exper 215 Employee Exper 235	Employee Misc Ext Employee Lodging Airfare Conference Fees Employee Car Ren Employee Business Employee Misc Ext	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 499 257 72.66 25.48	70.7 14.7 31.6 45.2 23.3 6.5 2.3
22 - HRIS/Payroll           20 - Contact Ctr - Spokane           54 - Corp & Subs Accountin           53 - Con, Ctr-Lewiston Billin           50 - Contact Ctr-Spokane C           54 - Corp & Subs Accountin           59 - Enterprise Busi Continu           51 - Claims           51 - Claims           51 - Claims           53 - Corp & Subs Accountin           53 - Corp & Subs Accountin           54 - Corp & Subs Accountin           53 - Con, Ctr-Lewiston Billin           54 - Corp & Subs Accountin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 220 Employee Exper 215 Employee Exper 215	Employee Misc Ext Employee Lodging Airfare Conference Fees Employee Car Ren Employee Business Employee Misc Ext Employee Business	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 499 257 72.66 25.48 47.14	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 51 - Legal Staff 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 54 - Corp & Subs Accountin 55 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 215 Employee Exper 215 Employee Exper 215 Employee Exper 235 Employee Exper 205	Employee Misc Ex; Employee Lodging Airfare Conference Fees Conference Fees Employee Car Ren Employee Busines: Employee Busines: Employee Busines: Airfare	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 257 72.66 25.48 47.14 238	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 55 - Interprise Busi Continu 51 - Claims 51 - Claims 51 - Legal Staff 53 - Cong & Subs Accountin 53 - Corp & Subs Accountin 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 59 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 205 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 220 Employee Exper 215 Employee Exper 235 Employee Exper 205 Employee Exper 205	Employee Misc Ext Employee Lodging Airfare Conference Fees Employee Car Ren Employee Busines: Employee Busines: Employee Busines: Airfare Airfare	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 499 257 72.66 25.48 47.14 238 258	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corg & Subs Accountin 53 - Con. Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 154 - Corg & Subs Accountin 55 - Enterprise Busi Continu 51 - Claims 101 - Legal Staff 54 - Corg & Subs Accountin 53 - Con, Ctr-Lewiston Billin 54 - Corg & Subs Accountin 59 - Enterprise Busi Continu 59 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 230 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 215 Employee Exper 215 Employee Exper 215 Employee Exper 235 Employee Exper 205	Employee Misc Ext Employee Lodging Airfare Conference Fees Employee Car Ren Employee Busines: Employee Busines: Employee Busines: Airfare Airfare	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 257 72.66 25.48 47.14 238	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4 21.6 23.4 1.4
02 - HRIS/Payroll 50 - Contact Ctr - Spokane 54 - Corp & Subs Accountin 53 - Con, Ctr-Lewiston Billin 50 - Contact Ctr-Spokane C 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 51 - Claims 61 - Legal Staff 53 - Corp & Subs Accountin 53 - Con, Ctr-Lewiston Billin 54 - Corp & Subs Accountin 59 - Enterprise Busi Continu 59 - Enterprise Busi Continu 59 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 205 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 220 Employee Exper 215 Employee Exper 235 Employee Exper 205 Employee Exper 205	Employee Misc Ext Employee Lodging Airfare Conference Fees Conference Fees Employee Car Ren Employee Misc Ext Employee Misc Ext Employee Busines: Airfare Airfare Employee Busines:	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 499 257 72.66 25.48 47.14 238 258	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4 21.6 23.4 1.4
N02 - HRIS/Payroll         250 - Contact Ctr - Spokane         54 - Corp & Subs Accountin         53 - Contact Ctr-Spokane C         54 - Corp & Subs Accountin         59 - Enterprise Busi Continu         51 - Colaims         101 - Legal Staff         154 - Corp & Subs Accountin         153 - Con, Ctr-Lewiston Billin         154 - Corp & Subs Accountin         153 - Con, Ctr-Lewiston Billin         154 - Corp & Subs Accountin         155 - Enterprise Busi Continu         159 - Enterprise Busi Continu	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 205 Employee Exper 205 Employee Exper 205 Employee Exper 225 Employee Exper 215 Employee Exper 215 Employee Exper 205 Employee Exper 205 Employee Exper 215 Employee Exper 215 Employee Exper 230	Employee Misc Ex Employee Lodging Airfare Conference Fees Employee Car Ren Employee Busines: Employee Busines: Airfare Airfare Employee Busines: Employee Busines:	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 257 72.66 25.48 47.14 238 258 16.33	4.2 70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4 21.6 23.4 1.4 61.9 4.6
102 - HRIS/Payroll         250 - Contact Ctr - Spokane         153 - Cong & Subs Accountin         153 - Cong & Subs Accountin         150 - Contact Ctr-Spokane C         150 - Contact Ctr-Spokane C         150 - Cong & Subs Accountin         153 - Cong & Subs Accountin         159 - Enterprise Busi Contin         161 - Claims         160 - Contact Ctr - Spokane	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 235 Employee Exper 205 Employee Exper 225 Employee Exper 225 Employee Exper 245 Employee Exper 215 Employee Exper 215 Employee Exper 205 Employee Exper 205 Employee Exper 235 Employee Exper 235 Employee Exper 235	Employee Misc Exp Employee Lodging Airfare Conference Fees Employee Car Ren Employee Business Employee Business Airfare Airfare Employee Business Employee Business Employee Lodging Employee Misc Exp	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 349 257 72.66 25.48 47.14 238 258 16.33 682.08 50.91	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4 1.4 61.9 4.6
102 - HRIS/Payroll           150 - Contact Ctr - Spokane           154 - Corp & Subs Accountin           153 - Conna Ctr-Spokane C           154 - Corp & Subs Accountin           150 - Contact Ctr-Spokane C           154 - Corp & Subs Accountin           151 - Claims           101 - Legal Staff           153 - Corp & Subs Accountin           153 - Corp & Subs Accountin           154 - Corp & Subs Accountin           155 - Cherprise Busi Continu           156 - Corp & Subs Accountin           158 - Enterprise Busi Continu           159 - Enterprise Busi Continu           150 - Claims           150 - Contact Ctr - Spokane           150 - Contact Ctr - Spokane	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Airfare, flight to WEI Business Acumen Leaders Course	Employee Exper 235 Employee Exper 205 Employee Exper 205 Employee Exper 205 Employee Exper 225 Employee Exper 215 Employee Exper 215 Employee Exper 205 Employee Exper 205 Employee Exper 215 Employee Exper 215 Employee Exper 230	Employee Misc Ex; Employee Lodging Airfare Conference Fees Employee Car Ren Employee Business: Employee Business: Airfare Airfare Employee Business: Employee Business: Employee Business: Employee Business: Employee Lodging Employee Lodging	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	46.65 779.4 162.6 499 257 72.66 25.48 47.14 238 258 258 16.33 682.08	70.7 14.7 31.6 45.2 23.3 6.5 2.3 4.2 21.6 23.4 21.6 23.4 1.4 61.9

F50 - Contact Ctr-Spokane C D54 - Corp & Subs Accounti			Meals, WEI Customer and Corp Symposium - Dinner		215 Employee Busines 230 Employee Lodging		71.74 574.23	6.5 52.1
		A and G Common Training A and G Common Training					1,399	126.9
J54 - Internal Auditing P99 - IT Director			AREN LORENZ-WESTERN ENERGY INSTITUTE		225 Conference Fees		453.2	41.1
		A and G Common Training	Airrare, WEI Conterence Airrare	Employee Exper		Non-Labor		
		A and G Common Training	Parking, Parking for John's car during WEI Leadership C		235 Employee Misc Exp		40	3.
		A and G Common Training	NICOLE RUMPEL-WESTERN ENERGY INSTITUTE		830 Dues	Non-Labor	798	72.
		A and G Common Training	Meals, dinner during WEI Leadership Course		215 Employee Busines		92.51	8
		A and G Common Training	Meals, Lunch for John during WEI leadership course trip		215 Employee Busines		41.5	3.
_51 - Claims		A and G Common Training	Meals, Dinner during duration of WEI Utility Training in Po		215 Employee Busines		61.63	5.
		A and G Common Training	Airfare, Alaska 0272311275654, Travel to Tacoma for Wi	Employee Exper		Non-Labor	177.21	16.
		A and G Common Training	Lodging, WEI ERAP Meeting		230 Employee Lodging		288.33	26
		A and G Common Training	Airfare, Flight for John to WEI leadership Course	Employee Exper		Non-Labor	119	1
L51 - Claims		A and G Common Training	Airfare, Alaska HDCCMI, WEI Conference, Portland OR.	Employee Exper		Non-Labor	198	17
		A and G Common Training	Meals, Meal Charge / WEI		215 Employee Busines		35.97	3
		Gas - Trade/Professional Ass	Seminar, Western Energy Institute Women in Energy Syr		950 Training	Non-Labor	599	187
G51 - Dir of Natural Gas		Gas - Trade/Professional Ass	Lodging, WEI Ops Conference		230 Employee Lodging	Non-Labor	902.99	282
E01 - Exec Administration	09903691	Corporate Planning-099	DEBBIE DEUBEL-WESTERN ENERGY INSTITUTE	Employee Exper	225 Conference Fees	Non-Labor	499	45
E01 - Exec Administration	09900310	Com - Trade/Professional As:	DEBBIE DEUBEL-WESTERN ENERGY INSTITUTE	Employee Exper	225 Conference Fees	Non-Labor	1,099	99
G08 - Gas Facilities Replace	r 09900311	Gas - Trade/Professional Ass	Airfare, Alaska 0272136377165, WEI Women in Energy \$	Employee Exper	205 Airfare	Non-Labor	427.19	133
G51 - Dir of Natural Gas	09900311	Gas - Trade/Professional Ass	Parking, WEI Ops Conference	Employee Exper	235 Employee Misc Ex	Non-Labor	32	
		A and G Common Training	CHAD SWANSON-WESTERN ENERGY INSTITUTE			Non-Labor	349	31
G51 - Dir of Natural Gas		Gas - Trade/Professional Ass	Meals, WEI Ops Conference		215 Employee Busines		54.58	17
B51 - Gas Engineering		Gas - Trade/Professional Ass	Conference, Conference registration fee for Spring 2022			Non-Labor	199	62
02 - Craft Training		A and G Common Training	BARBARA RIOS-PUENTE-PSI WEIGHT MGMT HMR		950 Training	Non-Labor	3,762	341
		A and G Common Training	EDWARD BERG-WESTERN ENERGY INSTITUTE		950 Training	Non-Labor	349	31
G51 - Dir of Natural Gas		Gas - Trade/Professional Ass	Conference WELConference Attendance DSMS			Non-Labor	849	265
G51 - Dir of Natural Gas		Gas - Trade/Professional Ass Gas - Trade/Professional Ass	Airfore Alaska IIIIVHI K Airfore to WELConference DS			Non-Labor	247.2	205
			Conference WELVistual Conference - PS	Employee Exper				
		Gas Trade Prof Org All States	Airford WEL Annual Conference			Non-Labor	199	62
E01 - Exec Administration		Com - Trade/Professional As	Airfare, WEI Annual Conference & Board meeting - Sept	Employee Exper		Non-Labor	437.98	39
E01 - Exec Administration		Corporate Planning-099	DEBBIE DEUBEL-WESTERN ENERGY INSTITUTE		225 Conference Fees	Non-Labor	199	18
G51 - Dir of Natural Gas		Gas - Trade/Professional Ass	Cab Fare, WEI Ops Conference		235 Employee Misc Ex		69.42	2
E01 - Exec Administration	09903691	Corporate Planning-099	DEBBIE DEUBEL-WESTERN ENERGY INSTITUTE	Employee Exper	225 Conference Fees	Non-Labor	-199	-18
E01 - Exec Administration	09900310	Com - Trade/Professional As:	ATHENA ALLEN-WESTERN ENERGY INSTITUTE	Voucher	838 Fees - General	Non-Labor	1,099	99
P02 - Utility Construction Scl	n 09902811	A and G Common Training	AARON ROBISON-WESTERN ENERGY INSTITUTE	Voucher	950 Training	Non-Labor	349	31
H07 - Facilities Management	11000050	Spokane Op Facility-Mission	GROUNDS COMPRESSOR RENTAL - WARREN WEIL	Voucher	925 Rental Expense - C	Non-Labor	147.97	13
		Spokane Op Facility-Mission	ALYSSA LECOUNT-WESTERN ENERGY INSTITUTE		830 Dues	Non-Labor	99	8
		Spokane Op Facility-Mission	ALYSSA LECOUNT-WESTERN ENERGY INSTITUTE	Voucher	830 Dues	Non-Labor	99	9
X02 - HR/Comp/Labor & Em			WEI Utility Fundamentals Course	Voucher	885 Miscellaneous	Non-Labor	7,800.1	708
L52 - Claims Accrual		A and G Common Training	Training for Lauren Sothen	Voucher	950 Training	Non-Labor	598	54.
	1	,						
E52 - Key Bus, Customer Ac	06800730	Oregon Sales and Marketing	Meals, Lunch while out of town for EEI conference	Employee Exper	215 Employee Busines	Non-Labor	11.4	1.
T08 - Electric Engineer		Admin Activities-Common to			225 Conference Fees		1,500	136.
T08 - Electric Engineer			Parking, Airport Parking EEI Trip		235 Employee Misc Exp		60	5
T08 - Electric Engineer			Lodging, EEI Conference Lodging		230 Employee Lodging		1,323.04	12
G02 - Employee Safety		Gen Safety/Health Admin-09			225 Conference Fees		375	34
G02 - Employee Safety		Gen Safety/Health Admin-09			210 Employee Auto Mil		41.25	3
T08 - Electric Engineer		Admin Activities-Common to		Employee Exper		Non-Labor	1,492.2	135
G02 - Employee Safety		Gen Safety/Health Admin-09			235 Employee Misc Ex		3	0.
G02 - Employee Safety	09902920	Gen Safety/Health Admin-09§	Parking, Parking for EEI conference	Employee Exper	235 Employee Misc Ex	Non-Labor	39.24	3
E01 - Exec Administration	09900330	Common-Company Commun	Lodging, Hotel Stay for EEI Legal Conference	Employee Exper	230 Employee Lodging	Non-Labor	957.04	86
C54 - Tax Services	09902811	A and G Common Training	Meals, snacks while traveling to EEI tax conference	Employee Exper	215 Employee Busines	Non-Labor	10.85	0
C54 - Tax Services	09902811	A and G Common Training	Meals, lunch during EEI tax conference	Employee Exper	215 Employee Busines	Non-Labor	55	4
C59 - Enterprise Busi Contin			Conference, EEI MA Fall Meeting Registration		225 Conference Fees		750	68
C39 - Security Director			Parking, EEI Conf		235 Employee Misc Ex		48	4
		A and G Common Training			220 Employee Car Ren		159.4	14
R11 - Regulatory Affairs		A and G Common Training	Conference, Conference Fee - 2022 EEI Electric Rates C				700	63
C54 - Tax Services		A and G Common Training	Parking, parking during EEI tax conference		235 Employee Misc Exp		48	4
		A and G Common Training	Conference, EEI Rates Course Conference		225 Conference Fees		700	63
R11 - Regulatory Affairs							700	80
	09902811	A and G Common Training	Lodging, lodging during EEI tax conference		230 Employee Lodging			
C54 - Tax Services			Meals, EEI Conf	Employee Exper	215 Employee Busines		123.05	11
C54 - Tax Services C39 - Security Director	09902811	A and G Common Training					44.16	4
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin	09902811 c 09902811	A and G Common Training	Cab Fare, Ride to apt - EEI meeting		235 Employee Misc Ex			7
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services	09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference	Employee Exper	215 Employee Busines	Non-Labor	80	
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services	09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference	Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines	Non-Labor Non-Labor	65.03	
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services	09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference	Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Ex	Non-Labor Non-Labor Non-Labor	65.03 38.4	3
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services R11 - Regulatory Affairs	09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI	Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Ex 225 Conference Fees	Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700	3 63
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services R11 - Regulatory Affairs C59 - Enterprise Busi Contin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Exp 225 Conference Fees 225 Conference Fees	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750	3 63 68
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services R11 - Regulatory Affairs C59 - Enterprise Busi Contin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training A and G Common Training A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Ex 225 Conference Fees	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700	3 63 68
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C54 - Tax Services	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training In Madison, WI Conference, EEI Mutual Assistance Mg.	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Exp 225 Conference Fees 225 Conference Fees	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750	3 63 68 139
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services R11 - Regulatory Affairs C59 - Enterprise Busi Contin C54 - Tax Services	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals. Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Conference registration	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Ex 225 Conference Fees 225 Conference Fees 225 Conference Fees 215 Employee Busines	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95	3 63 68 139 1
C54 - Tax Services C59 - Execurity Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C54 - Tax Services C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Mutual Assistance Mtg. Conference, EEI Mutual Assistance Mtg. Edging, Hotel for EEI NRE FX	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Business 215 Employee Business 235 Employee Miss Ex 225 Conference Fees 225 Conference Fees 215 Employee Business 230 Employee Lodging	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76	3 63 68 139 1 33
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C59 - Security Director	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals. Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Mutual Assistance Mtg. Conference, EEI Conference registration Meals, EEI MA Meeting Dinner Lodging, Hotel for EEI NRE FX Cab Fare, EEI Conf	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines: 215 Employee Busines: 235 Employee Misc Ex 225 Conference Fees 225 Conference Fees 215 Employee Busines: 230 Employee Lodging 235 Employee Misc Ex	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76 36.78	3 63 68 139 1 33 3
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services R11 - Regulatory Affairs C59 - Enterprise Busi Contin C54 - Tax Services C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Security Director C39 - Security Director	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Conference, EEI Rates Training in Madison, Wi Conference, EEI Autual Assistance Mtg. Conference, EEI conference registration Meals, EEI Conference PEI conference Lodging, Hotel for EEI NRE FX Cab Fare, EEI Conf	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Exy 225 Conference Fees 225 Conference Fees 215 Employee Busines 230 Employee Lodging 235 Employee Misc Exy 230 Employee Lodging	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76 36.78 1,498.65	3. 63. 68. 139. 1. 33. 3. 136.
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C39 - Security Director C39 - Security Director C39 - Security Director	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Mutual Assistance Mtg. Cab Fare, EEI Conf Cab Fare, Ride to hotel - EEI Meeting	Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 235 Employee Misc Ex 225 Conference Fees 225 Conference Fees 215 Conference Fees 216 Employee Busines 230 Employee Lodging 235 Employee Lodging 235 Employee Misc Ex 230 Employee Misc Ex	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76 36.78 1,498.65 34.42	3. 63. 68. 139. 1. 33. 3. 136. 3.
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C39 - Security Director C39 - Security Director C39 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin C59 - Enterprise Busi Contin	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Conference registration Meals, EEI MA Meeting Dinner Lodging, Hotel for EEI NRE FX Cab Fare, EEI Conf Cab Fare, Ride to hotel - EEI Meeting Alfare, Alaska 0272311273593, Travel to Bellevue for EEI	Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 225 Employee Misc Exi 225 Conference Fees 225 Conference Fees 230 Employee Busines 230 Employee Busines 235 Employee Lodging 235 Employee Lodging 235 Employee Misc Exi 230 Employee Misc Exi 230 Employee Misc Exi 235 Employee Misc Exi 236 Employee Misc Exi	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76 36.78 1,498.65 34.42 237.2	3 63 68 139 1 33 3 136 3 21
C54 - Tax Services C39 - Security Director C59 - Enterprise Busi Contin C54 - Tax Services C54 - Tax Services C54 - Tax Services C54 - Tax Services C59 - Enterprise Busi Contin C54 - Tax Services C59 - Enterprise Busi Contin C39 - Security Director C39 - Security Director C39 - Security Director	09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811 09902811	A and G Common Training A and G Common Training	Cab Fare, Ride to apt - EEI meeting Meals, dinner during EEI tax conference Meals, Dinner during EEI tax conference Cab Fare, travel during EEI tax conference Conference, EEI Rates Training in Madison, WI Conference, EEI Mutual Assistance Mtg. Conference, EEI Mutual Assistance Mtg. Cab Fare, EEI Conf Cab Fare, Ride to hotel - EEI Meeting	Employee Exper Employee Exper	215 Employee Busines 215 Employee Busines 225 Employee Miss Ex 225 Conference Fees 225 Conference Fees 215 Employee Busines 230 Employee Miss Ex 230 Employee Miss Ex 230 Employee Miss Ex 230 Employee Miss Ex 230 Final State State State State 235 Employee Miss Ex 236 Aufrare	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	65.03 38.4 700 750 1,540 18.95 371.76 36.78 1,498.65 34.42	3 63 68 139 1 33 3 136 3

C59 - Enterprise Busi Continu			Parking, EEI MA Meeting		235 Employee Misc Exp 205 Airford		48	4.3
C59 - Enterprise Busi Continu			Airfare, EEI Mutual Assistance Mtg	Employee Exper		Non-Labor	809.21	73.4
		A and G Common Training	Cab Fare, EEI Conf		235 Employee Misc Exp		42.05	3.8
		A and G Common Training	Conference, EEI Conf			Non-Labor	400	36.3
C59 - Enterprise Busi Continu			Lodging, EEI Mutual Asst. Meeting		230 Employee Lodging		668.67	60.6
C59 - Enterprise Busi Continu				Employee Exper		Non-Labor	187	16.9
		A and G Common Training			230 Employee Lodging		889.17	80.7
C59 - Enterprise Busi Continu					225 Conference Fees		750	68.0
		Common Regulatory Activitie			215 Employee Busines		143.14	1
		Common Regulatory Activitie		Employee Exper		Non-Labor	70	6.3
R11 - Regulatory Affairs	09900540	Common Regulatory Activitie	Parking, EEI Meeting	Employee Exper	235 Employee Misc Exp	Non-Labor	48	4.3
		Common Regulatory Activitie				Non-Labor	500	45.3
R11 - Regulatory Affairs	09900540	Common Regulatory Activitie	Conference, EEI 2022 Electric Rates Course: Rates in a	Employee Exper	225 Conference Fees	Non-Labor	700	63.5
R11 - Regulatory Affairs	09900540	Common Regulatory Activitie	Lodging, EEI Meeting	Employee Exper	230 Employee Lodging	Non-Labor	1,018.41	92.4
R11 - Regulatory Affairs	09900540	Common Regulatory Activitie	Cab Fare, EEI Meeting	Employee Exper	235 Employee Misc Exp	Non-Labor	97.87	8
F52 - Key Bus. Customer Acc	09905544	Gas Trade Prof Org All States	Conference, EEI Spring Key Account Workshop	Employee Exper	225 Conference Fees	Non-Labor	975	304.8
S20 - Director of Finance	09903370	Treasury Activities-099	Lodging, Hotel for EEI Risk Mgr conference 3/1 - 3/3. 2 r	Employee Exper	230 Employee Lodging	Non-Labor	582.76	52
		Treasury Activities-099	Meals, Dinner - EEI conference, 3/2	Employee Exper	215 Employee Busines:	Non-Labor	77	6.9
		Treasury Activities-099	Conference, Conference Fee for EEI Risk Manager Meet				665	60.3
Y54 - Strategic Corp Develop			DEBBIE DEUBEL-EDISON ELECTRIC INST.			Non-Labor	1,400	130
		Treasury Activities-099	DEBBIE DEUBEL-EDISON ELECTRIC INST			Non-Labor	1,400	130
			JENIFER PEARSON-EDISON ELECTRIC INST.		885 Miscellaneous	Non-Labor	750	68.0
		A and G Common Training	KAREN LORENZ-EDISON ELECTRIC INST.			Non-Labor	-100	-9
A07 - Gen Mgmt & Admin Su					950 Training	Non-Labor	1,250	116.3
Nor - Gen Wynit a Aumin Su	03902011	A and G Common Haining	DANDARY NOS-FUENTE-EDISON ELECTRIC INSTITU	VOUCHEI	550 Halling	NOTI-Labor	1,200	110.3
E55 Einancial Dianning and	00002014	A and G Common Training	Airfore Rebooked airfore due to concellation by siding to	Employee Ever-	205 Airforo	Non-Labor	294.6	26.7
F55 - Financial Planning and			Airfare, Rebooked airfare due to cancellation by airline - 1					
					215 Employee Business		21.77	1.9
			Conference, Attending the June-22 EEI-AGA Chief Audit				1,400	127.0
F55 - Financial Planning and			Car Rental, Fuel for car rental for EEI/AGA spring accour				13.76	1.2
			Cab Fare, Amy Boettner From hotel to airport 2022 AGA/				32.95	2.9
A57 - Ed Utility Accounting	09902811	A and G Common Training	Meals, Airport Parking - EEI/AGA Spring 2022 Accounting	Employee Exper	215 Employee Business	Non-Labor	48	4.3
F55 - Financial Planning and	09902811	A and G Common Training	Parking, Airport parking for EEI/AGA spring accounting o	Employee Exper	235 Employee Misc Exp	Non-Labor	48	4.3
T54 - Rev and Fin Systems	09902811	A and G Common Training	ATHENA DICKERSON-EDISON ELECTRIC INST.	Voucher	885 Miscellaneous	Non-Labor	1,949	176.9
			Cab Fare, Uber for Amy Boettner and Alan Pan from dinr		235 Employee Misc Exp	Non-Labor	9.44	8.0
F55 - Financial Planning and	09902811		Conference, EEI/AGA conference registration for JWebst				1.475	133.8
					215 Employee Busines		25.84	2.3
			Cab Fare, Cab for Amy Boettner and Alan Pan from airpo				51.3	4.6
			Meals, Fall 2021 EEI/AGA Accounting Conference - Lunc				10.98	1.0
							30	2.7
			Misc, Baggage - ABQ-GEG - EEI/AGA Spring 2022 Acco					
			Lodging, Hotel - EEI/AGA Spring 2022 Accounting Confe				775.41	70.3
F55 - Financial Planning and			Car Rental, Car rental for EEI/AGA spring accounting cor				205.88	18.6
			Conference, EEI/AGA Property Conference Fee		225 Conference Fees		1,475	133.8
			Meals, Breakfast - EEI/AGA Spring 2022 Accounting Cor				11.14	1.0
A57 - Ed Utility Accounting	09902811	A and G Common Training	Lodging, Hyatt Lodging - EEI/AGA Spring 2022 Conferen	Employee Exper	230 Employee Lodging	Non-Labor	775.41	70.3
C54 - Tax Services	09902811	A and G Common Training	KAREN LORENZ-EDISON ELECTRIC INST.	Employee Exper	225 Conference Fees	Non-Labor	400	37.2
-			REGISTRATION TO THE 2018 AGA/EEI FALL ACCOUNTING CONFERENCE IN SAN ANTONIO, TX. THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.			Non-Labor	-100	-9.0
			Misc, Baggage - GEG-ABQ - EEI/AGA Spring 2022 Acco				30	2.7
			Cab Fare, Fall 2021 EEI/AGA Accounting Conference - T	Employee Exper	235 Employee Misc Exp	Non-Labor	89.82	8.3
			Seminar, Registration Fee for 2022 AGA/EEI Property Ac		950 Training	Non-Labor	895	81.2
J54 - Internal Auditing	09902811	A and G Common Training	Meals, Lunch 2022 AGA/EEI Auditor Training Conference	Employee Exper	215 Employee Business	Non-Labor	68.26	6.
			Mileage, Fall 2021 EEI/AGA Accounting Conference - Av				5.49	0.
			Cab Fare, Amy Boettner to Spokane airport 2022 AGA/E				70	6.
					215 Employee Busines		26.02	2.
55 - Financial Planning and			Lodging, Lodging for EEI/AGA spring accounting confere				775.41	70.
			Car Rental, 6/12-15/22 Hotel for EEI-AGA CAE Conferen				399.92	36
							112.6	10.2
			Meals, Dinner EEI/AGA training DISCOUNT OF \$200 PER ATTENDEE FOR GROUP		215 Employee Business		-600	
A57 - Ed Utility Accounting	09902811		DISCOUNT OF \$200 PER ATTENDE FOR GROUP REGISTRATION TO THE 2021 AGA/EEI ADVANCED PUBLIC ACCOUNTING COURSE HELD VIRTUALLY FROM AUGUST 24-27, 2021. DUE TO COVID, THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.	Employee Exper	225 Conference Fees	Non-Labor	-600	-54.4
J54 - Internal Auditing	09902811	A and G Common Training	Meals, 6/15/22 Dinner for EEI-AGA CAE Conference	Employee Exper	215 Employee Business	Non-Labor	38.6	3
			Mileage, Fall 2021 EEI/AGA Accounting Conference - GE				5.26	0.4
57 - Ed Utility Accounting D54 - Corp & Subs Accountin		A and G Common Training	Mileage, Fail 2021 ELIAGA Accounting Conference - GE DISCOUNT OF \$200 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2021 AGA/EEI ADVANCED PUBLIC ACCOUNTING COURSE HELD VIRTUALLY FROM AUGUST 14-27, 2021. DUE TO COVID, THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.		210 Employee Auto Mili 225 Conference Fees		-200	-18.1

T54 - Rev and Fin Systems		A and G Common Training	Meals, Snack EEI/AGA training		215 Employee Busines		16.75	1.5
Y55 - Resource Accounting	09902811	A and G Common Training	DISCOUNT OF \$200.00 PER ATTENDEE FOR	Voucher	950 Training	Non-Labor	-200	-18.1
			GROUP REGISTRATION 2020 AGA/EEI INTRO					
			PUBLIC ACCTING CONFERENCE-HELD VIRTUALLY					
J54 - Internal Auditing		A and G Common Training	Meals, 6/12/22 Dinner for EEI-AGA CAE Conference	Employee Exper	215 Employee Busines	Non-Labor	17.5	1.
J54 - Internal Auditing	09902811	A and G Common Training	ATHENA DICKERSON-EDISON ELECTRIC INST.	Voucher	885 Miscellaneous	Non-Labor	1,449	131.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Meals, Fall 2021 EEI/AGA Accounting Conference - Dinn	Employee Exper	215 Employee Busines	Non-Labor	188.71	17.
C54 - Tax Services	09902811	A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REG TO THE 2018 AGA/EEI INTRO TO PUBLIC ACCTG CONF IN ST LOUIS, MO. REFUNDS HAVE BEEN DELAYED IN ARRIVING, PLUS ONE REG AT THE NON-MEMBER PRICE	Employee Exper	225 Conference Fees	Non-Labor	-100	-9.(
F55 - Financial Planning and	09902811	A and G Common Training	DISCOUNT OF \$200.00 PER ATTENDEE FOR GROUP REGISTRATION 2020 AGA/EEI INTRO PUBLIC ACCTING CONFERENCE-HELD VIRTUALLY	Voucher	950 Training	Non-Labor	-600	-54.4
T54 - Rev and Fin Systems	09902811	A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REG TO THE 2018 AGAJEEI INTRO TO PUBLIC ACCTG CONF IN ST LOUIS, MO. REFUNDS HAVE BEEN DELAYED IN ARRIVING, PLUS ONE REG AT THE NON-MEMBER PRICE	Employee Exper	225 Conference Fees	Non-Labor	-700	-63.5
A57 - Ed Utility Accounting	09902811	A and G Common Training	Conference, EEI/AGA Accounting Conference Fee	Employee Exper	225 Conference Fees	Non-Labor	1,475	133.8
T54 - Rev and Fin Systems		A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2018 AGA/EEI FALL ACCOUNTING CONFERENCE IN SAN ANTONIO, TX. THESE REFUNDS HAVE BEEN DELAYED IN		225 Conference Fees	Non-Labor	-100	-9.0
			ARRIVING.					
F55 - Financial Planning and	09902811	A and G Common Training	Meals, Meal for EEI/AGA spring accounting conference	Employee Exper	215 Employee Busines	Non-Labor	49.77	4.5
- F55 - Financial Planning and	09902811	A and G Common Training	Airfare, Refund of canceled airfare to EEI/AGA spring ac	Employee Exper	205 Airfare	Non-Labor	-268.61	-24.
354 - Finance Administration	09902811	A and G Common Training	ATHENA DICKERSON-EDISON ELECTRIC INST.	Employee Exper	225 Conference Fees	Non-Labor	1,545	140.
E14 - Environmental Complia	09902811	A and G Common Training	LISA BRICKNER-EDISON ELECTRIC INST.	Voucher	950 Training	Non-Labor	25	2.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Misc, Fall 2021 EEI/AGA Accounting Conference - Bagga	Employee Exper	235 Employee Misc Ex	Non-Labor	60	5.
A57 - Ed Utility Accounting		A and G Common Training	Meals, Fall 2021 EEI/AGA Accounting Conference - Brea				26.56	2.
A57 - Ed Utility Accounting		A and G Common Training	Airfare, Baggage fee - EEI/AGA Spring 2022 Conference			Non-Labor	60	5.
A57 - Ed Utility Accounting		A and G Common Training	Mileage, To airport from Mission - EEI/AGA Spring 2022			Non-Labor	5.5	(
154 - Rev and Fin Systems		A and G Common Training	ATHENA DICKERSON-EDISON ELECTRIC INST.			Non-Labor	1.475	133.
A57 - Ed Utility Accounting		A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2018 AGA/EEI FALL		225 Conference Fees	Non-Labor	-200	-18.
			ACCOUNTING CONFERENCE IN SAN ANTONIO, TX. THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.					
A57 - Ed Utility Accounting	09902811	A and G Common Training	Mileage, Home-GEG - EEI/AGA Spring 2022 Accounting	Employee Exper	210 Employee Auto Mi	Non-Labor	5.09	0.4
J54 - Internal Auditing	09902811	A and G Common Training	Airfare, 8/21-8/24/2022 EEI-AGA Conference	Employee Exper	205 Airfare	Non-Labor	704.2	63.
55 - Financial Planning and	09902811	A and G Common Training	Airfare, Airfare to EEI/AGA conference for JWebster	Employee Exper	205 Airfare	Non-Labor	606.59	55.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Conference, Registration Fee for 2022 AGA/EEI Fall Acc	Employee Exper	225 Conference Fees	Non-Labor	1,395	126.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Airfare, Delta 0062480458504, Fall 2021 EEI/AGA Accou	Employee Exper	205 Airfare	Non-Labor	390.4	36.
A57 - Ed Utility Accounting		A and G Common Training	Airfare, Alaska , Travel to/from EEI/AGA Conference	Employee Exper		Non-Labor	537.21	48.
J54 - Internal Auditing		A and G Common Training	Airfare, Plane ticket to the June 12-15, 2022 EEI/AGA CA			Non-Labor	527.2	47.
A57 - Ed Utility Accounting		A and G Common Training	Mileage, from airport to Mission - EEI/AGA Spring 2022 (				5.5	(
A57 - Ed Utility Accounting		A and G Common Training	Airfare, Delta 0062308792451, EEI/AGA Spring 2022 Ac			Non-Labor	617.2	56.
T54 - Rev and Fin Systems		A and G Common Training	DISCOUNT OF \$200.00 PER ATTENDEE FOR GROUP REGISTRATION 2020 AGA/EEI INTRO PUBLIC ACCTING CONFERENCE-HELD VIRTUALLY		950 Training	Non-Labor	-200	-18.
J54 - Internal Auditing	09902811	A and G Common Training	Parking, 6/12-15/22 Airport parking for EEI-AGA CAE Co	Employee Exper	235 Employee Misc Ex	Non-Labor	48	4.
J54 - Internal Auditing		A and G Common Training	Lodging, Amy Boettner hotel room 2022 AGA/EEI Audito				599.73	54.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Meals, Fall 2021 EEI/AGA Accounting Conference - Sod	Employee Exper	215 Employee Busines	Non-Labor	4.5	0.
T54 - Rev and Fin Systems	09902811	A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2019 AGA/EEI FALL ACCOUNTING CONFERENCE IN TUCSON, AZ. DUE TO COVID, THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.	Employee Exper	225 Conference Fees	Non-Labor	-300	-27.
A57 - Ed Utility Accounting	09902811	A and G Common Training	Training, EEI/AGA Spring 2022 Accounting Conference R	Voucher	950 Training	Non-Labor	1,475	133.8
J54 - Internal Auditing		A and G Common Training	Meals, Dinner 2022 AGA/EEI Auditor Training Conference				169.41	15.
A57 - Ed Utility Accounting		A and G Common Training	DISCOUNT OF \$200.00 PER ATTENDEE FOR GROUP REGISTRATION 2020 AGA/EEI INTRO PUBLIC ACCTING CONFERENCE-HELD VIRTUALLY		950 Training	Non-Labor	-400	-36.
J54 - Internal Auditing	09902811	A and G Common Training	Lodging, 6/12-15/22 Hotel for EEI-AGA CAE Conference	Employee Exper	230 Employee Lodaina	Non-Labor	775.41	70.
A57 - Ed Utility Accounting		A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2019 AGA/EEI FALL ACCOUNTING CONFERENCE IN TUCSON, AZ. DUE TO COVID, THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.			Non-Labor	-200	-18.
D54 - Corp & Subs Accountir	09902811	A and G Common Training	DISCOUNT OF \$100 PER ATTENDEE FOR GROUP REGISTRATION TO THE 2018 AGA/EEI FALL ACCOUNTING CONFERENCE IN SAN ANTONIO, TX. THESE REFUNDS HAVE BEEN DELAYED IN ARRIVING.	Employee Exper	225 Conference Fees	Non-Labor	-100	-9.(

F54 - Rev and Fin Systems	09902811	A and G Common Training	Cab Fare, Cab from hotel to airport EEI/AGA training	Employee Exper	235 Employee Misc Exp	Non-Labor	31	2.8
A57 - Ed Utility Accounting	09902811	A and G Common Training	Mileage, GEG-Home - EEI/AGA Spring 2022 Accounting	Employee Exper	210 Employee Auto Mile	Non-Labor	5.09	0.4
J54 - Internal Auditing	09902811	A and G Common Training	Meals, 6/15/22 Lunch for EEI-AGA CAE Conference	Employee Exper	215 Employee Business	Non-Labor	18.73	1.
J54 - Internal Auditing	09902811	A and G Common Training	Meals, Snack 2022 AGA/EEI Auditor Training Conference	Employee Exper	215 Employee Business	Non-Labor	10.19	0.9
A57 - Ed Utility Accounting	09902811	A and G Common Training	Lodging, Fall 2021 EEI/AGA Accounting Conference - Ho	Employee Exper	230 Employee Lodging	Non-Labor	1,345.52	125.2
A57 - Ed Utility Accounting	09902811	A and G Common Training	Meals, Lunch - EEI/AGA Spring 2022 Conference	Employee Exper	215 Employee Business	Non-Labor	97.67	8.8
A57 - Ed Utility Accounting	09902811	A and G Common Training	Meals, Coffee - EEI/AGA Spring 2022 Accounting Confer	Employee Exper	215 Employee Business	Non-Labor	21.54	1.9
F54 - Rev and Fin Systems	09902811	A and G Common Training	Meals, Lunch EEI/AGA training	Employee Exper	215 Employee Business	Non-Labor	33.06	
A57 - Ed Utility Accounting	09902811	A and G Common Training	Cab Fare, Lyft - EEI/AGA Spring 2022 Conference	Employee Exper	235 Employee Misc Exp	Non-Labor	43.19	3.9
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Meals, Gas conference Denver	Employee Exper	215 Employee Business	Non-Labor	20.63	6.4
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Airfare, Southwest 3BC9HV, Gas Conference Spok to De	Employee Exper	205 Airfare	Non-Labor	342.98	107.2
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Parking, Gas conference/Pipeline meeting	Employee Exper	235 Employee Misc Exp	Non-Labor	40	12.5
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Car Rental, Gas Conference Denver Budget	Employee Exper	220 Employee Car Ren	Non-Labor	292.9	91.5
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Meals, Gas Conference Denver	Employee Exper	215 Employee Business	Non-Labor	139.33	43.5
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Misc, Gas Conference - Denver GAS	Employee Exper	235 Employee Misc Exp	Non-Labor	24.92	7.7
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Parking, Gas Conference Denver WESTIN	Employee Exper	235 Employee Misc Exp	Non-Labor	68	21.2
055 - Natural Gas Resource	s 09902454	Gas Resource Expense	Lodging, Gas Conference Denver Westin	Employee Exper	230 Employee Lodging	Non-Labor	652.83	204.
555 - Natural Gas Resource	3 03502454	Gas Resource Expense	Louging, das conterence Denver Wesun	Linpioyee Exper	200 Employee Lodging	Non-Labor	032.05	2
E01 - Exec Administration	09900310	Com - Trade/Professional As	AGA Membership dues	Voucher	830 Dues	Non-Labor	257,840	23,404.1
E01 - Exec Administration	09900310	Com - Trade/Professional As	WEI annual membership dues	Voucher	830 Dues	Non-Labor	29,723.9	2,698.0
=01 - Exec Administration		Com - Trade/Professional As		Voucher	830 Dues	Non-Labor	91.136	8.272.4

February 2, 2022

Members of the Washington State House of Representatives:

We appreciate this opportunity to provide you with our common perspective on several related bills currently before the House including HB 1766 (clean heat), HB 1767 (targeted electrification) and HB 1770 (building codes). In short, we have been consistent and remain united in our opposition to these measures.

The signatories to this letter support thoughtful decarbonization pathways that safeguard energy reliability, sustain quality careers, and preserve energy affordability to the greatest extent possible.

We oppose HB 1766, HB 1767, and HB 1770 because they fail to meet the standard of thoughtful policies set by this legislature in so many other landmark laws. They reject the gas system – 45,000 miles of safe and reliable energy delivery infrastructure – as an essential tool to achieving the carbon reductions we desire faster, more reliably, and more affordably. These policy proposals reflect the same premise of last year's failed HB 1084: a disregard for data-driven, common-sense policy.

Regarding HB 1766, proponents claim that there is no plan for how the gas system will meet the State's greenhouse gas emission (GHG) reduction goals. On the contrary, we supported Washington's historic Climate Commitment Act in 2021, which prescribes a compliance pathway that must be met. Additionally, the integrated resource planning process conducted by gas utilities at the direction of the Utilities and Transportation Commission (UTC) describes how each investor-owned utility will acquire requisite resources to serve anticipated demand in compliance with existing laws and regulations.

We maintain that HB 1767, the electrification bill, violates the state constitution (see attached legal analysis). Beyond its legal infirmities, the results of this policy could be troubling for grid reliability and ratepayers. Proponents maintain that the policy simply enables a voluntary process for both the customer owned utility (COU) and the consumer. However, it fails to consider the cost to ratepayers for the infrastructure it will decommission. It also fails to consider the utility of that infrastructure to deliver decarbonized fuels and help relieve stress on the electric grid.

COUs that have excess clean energy currently sell that excess, allowing other utilities to access it. Under HB 1767, those COUs will retain more and more of that energy to displace loads currently served by the gas system. But as that

load increases, Washington will require a significant amount of new generation and transmission to power these policies while also complying with CETA. This only adds to the financial burden of the gas utilities who must scrap their infrastructure investment deemed obsolete by this legislation. Furthermore, history demonstrates that siting such facilities is a difficult, lengthy, and uncertain process at best.

The bill also provides an exhaustive list of what a COU's governing board must consider in determining whether an electrification plan is beneficial without establishing objective measures of what constitutes a benefit. The determination is left to the subjective judgement of the utility's governing board.

The electrification bill clearly lacks the requisite data to warrant its adoption. In fact, securing necessary data to inform future carbon policies is the very rationale for why we and other stakeholders negotiated, and agreed to, the UTC Proviso in good faith. Finally, the electrification policy adds nothing to the Climate Commitment Act (CCA) in terms of achieving the State's GHG reduction goals. The CCA mandates that GHG reductions occur in line with the State's goals and provides a market-based mechanism to facilitate compliance.

HB 1770, the building codes bill also fails to meet the thoughtful policy standard. It adds costs to buildings while doing nothing to achieve GHG reductions beyond those already mandated by the CCA. Our concern is that this approach fails to promote innovation and creative thinking by prematurely determining which decarbonization pathways must be pursued. Washington is a geographically diverse state. What is good local government policy in Sprague is not necessarily good in Sequim. A single state-wide reach code developed by an unelected Board, appointed at the whim of the Governor (State Building Codes Council) should give all good government advocates pause.

Each of these bills individually – and collectively – deprive the building sector of using market-based solutions to achieve carbon reductions, as was contemplated in the Climate Commitment Act. Instead, these bills mandate approaches that ignore feasibility and cost considerations. These measures threaten life-long, good paying careers. They propose the use of public funds for fuel switching (expressly prohibited by the state Constitution). The bills will burden residents and building owners with higher costs and create duplicative regulatory requirements already addressed by existing economy-wide directives to reduce emissions on a trajectory based on the best climate science. The signatories to this letter oppose the three bills in question. We will continue to support and engage in the effective implementation of the landmark, economy-wide, carbon reduction policies already on the books. We support and are engaged in the UTC's decarbonization investigation because it will produce an objective analysis to inform future policy deliberations.

Again, thank you for the opportunity to comment on the proposals. Please let us know if you have any questions.

The following organizations sign this letter:







IBEV

Local 121-C



















550CIATION

MOLDNIHS & MEST. 1954 SHAT











**AACC** 

WASHINGTON AIR CONDITIONING CONTRACTORS ASSOCIATION





In the Community to Serve\*













WASHINGTON







# Legal analysis re: targeted electrification



October 21, 2021

Mr. Noah Guzzo Purcell Solicitor General Office of the Attorney General PO Box 40100 Olympia, WA 98504-0100

Dear Mr. Purcell,

On October 11, 2021, Avista Corp (Avista) provided notice of its intent to submit comments with respect to the request for an Attorney General's opinion by the Honorable Alex Ramel, State Representative, District 40, Opinion Docket No. 21-09-01. Following are responses to the questions posed by Rep. Ramel in his opinion request prepared by outside counsel and submitted by Avista for your consideration. We respectfully submit these as Avista's comments on this matter. Additionally, we would request an opportunity for Avista and our legal counsel to discuss this analysis with you in more detail.

# Question 1 - If a municipal electric utility or public utility district adopts a beneficial electrification plan complying with section 16 or 17, respectively, would the expenditure of utility funds pursuant to that plan (e.g., investing in the electrification of customer equipment) be permissible under Washington law, including the state constitution?

No, the expenditure of utility funds to ratepayers pursuant to section 16 or 17 of House Bill 1084 ("the Bill") would violate the state constitution's prohibition on gifting public funds.

Sections 16 and 17 of the Bill would create a scheme whereby municipal electric utilities and public utility districts (collectively, "Public Utilities") gift or loan funds to ratepayers to aid in their conversion from non-electrical energy sources to "electrically powered equipment." However, any incentive, rebate, or loan to ratepayers to facilitate their purchase of equipment to transition to electric power from another source of power would be an impermissible gift of public funds in violation of the state constitution.

Article 8, sections 5 and 7 of the state constitution require that "[n]o county, city, town or other municipal corporation shall hereafter give any money, or property, or loan its money, or credit to or in aid of any individual, association, company or corporation, except for the necessary support of the poor and infirm..."<sup>1</sup> and that "[t]he credit of the state shall not, in any manner be given or loaned to, or in aid of, any individual, association, company or corporation."<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Wash. Const. art. VIII, § 7.

<sup>&</sup>lt;sup>2</sup> *Id.* at art VIII, § 5.

In recognition of this broad prohibition on the gifting of public funds and to facilitate energy conservation, the constitution was amended in 1979 and 1988<sup>3</sup> to allow a narrow exception to "use public moneys or credit derived from operating revenues from the sale of... energy... to assist the owners of structures or equipment in financing the acquisition and installation of materials and equipment for the conservation or more efficient use of... energy... in such structures or equipment."<sup>4,</sup> The Washington Supreme Court has stated that "[t]he amendment [article 8, section 10] empowered the Legislature to authorize municipal utilities to offer loan financing to owners of residential structures for the purpose of installing effective conservation materials and equipment."5 Specifically, the amendment allowed public utilities to "use public moneys or credit derived from operating revenues" to "assist the owners of structures or equipment in financing the acquisition and installation of materials and equipment for the conservation or more efficient use of ... energy."<sup>6</sup> The amendment explicitly limited this assistance to conservation efforts by requiring that "[a]ny financing for energy conservation authorized by this article shall only be used for conservation purposes in existing structures and shall not be used for any purpose which results in a conversion from one energy source to another."7

The meaning of the conservation limitation and its effect on the ability of Public Utilities to provide financing for ratepayer equipment was the subject of an opinion by Attorney General Christine Gregoire ("AG") in 2001.<sup>8</sup> The opinion was in response to a question from a state senator<sup>9</sup> regarding whether a public utility district could provide financing to ratepayers for the installation or operation of equipment such as pellet stoves, solar systems, wind turbines, geothermal systems, or mini-hydroelectric generating systems within the confines of article 8, section 10 of the state constitution and the statute dealing with energy conservation plans of municipal utilities.<sup>10</sup> The AG concluded that under the plain meaning of the amendments and in light of the legislative history and voters pamphlet surrounding the 1979 and 1988 passages of the amendments, "a PUD ["public utility district"] cannot provide financing to ratepayers for the purchase or installation of equipment that would result in a change from one energy source to another."<sup>11</sup> In reaching that conclusion, the AG reasoned that the purchase of the equipment contemplated (pellet stoves, solar systems, etc.) would result in energy production from a

<sup>10</sup> Wash. AGO 2001 NO. 7 (Wash. A.G.), 2001 WL 1250134 at \*1. The statute at issue was RCW 54.16.280, which addressed how PUDs could provide financing to ratepayers for the purposes of energy conservation.

<sup>11</sup> *Id.* at \*5.



<sup>&</sup>lt;sup>3</sup> By its own terms, the 1979 amendment ("Amendment 70") expired in 1990. However, in 1988, voters adopted Amendment 82, which effectively made Amendment 70 permanent.
<sup>4</sup> Wash. Const. art. VIII, § 10.

<sup>&</sup>lt;sup>5</sup> *City of Tacoma v. Taxpayers of City of Tacoma* ("*Tacoma v. Taxpayers*"), 108 Wash. 2d 679, 686-87 (1987) (emphasis added); *id.* at 691 (recognizing that article 8, section 10 was "for the limited purpose of creating a narrow exception to the article 8, section 7 loan prohibition."). <sup>6</sup> Wash. Const. art. VIII, § 10 (emphasis added).

<sup>&</sup>lt;sup>7</sup> Wash. Const. art. VIII, § 10 (emphasis added).

<sup>8</sup> Wash. AGO 2001 NO. 7 (Wash. A.G.), 2001 WL 1250134

<sup>&</sup>lt;sup>9</sup> The question was asked of Attorney General Christine Gregoire by State Senator Bob Morton.

different source, both in the sense of the method of energy production and the provider (no longer a utility, but the ratepayer).<sup>12</sup> The AG noted that "the Legislature considered 'energy source" very broadly, to include both the kind of energy and the entity that provides the energy" and that floor debate on HJR 4223 in 1988<sup>13</sup> evidenced this.<sup>14</sup> Also, the "Statement For" in the voters' pamphlet for the 1988 amendment read that "[l]oans can only be used for the purchase and installation of energy conservation materials. They cannot be used to change from one energy source to another."<sup>15</sup> Finally, the AG noted that the statute, <sup>16</sup> which defined "energy conservation measure" purported to include alternate energy sources, such as solar heating systems, but that "this statute does not change our reading of article VIII, section 10, which authorizes financing of energy conservation projects within limits."<sup>17</sup>

Sections 16 and 17 authorize municipal electric utilities and public utility districts to implement "Beneficial Electrification Plans" ("BEPs") that entail gifts or loans funds to ratepayers through "customer incentives or rebates" to aid in the conversion of ratepayer equipment to "electrically powered equipment." Just like the assistance contemplated in the 2001 AG opinion, the "customer incentives or rebates" contemplated in the Bill fall outside the scope of "conservation or more efficient use" of energy and are, therefore, unconstitutional gifts of public funds. While the bill does not overtly purport to characterize "beneficial electrification" as resulting in "conservation or more efficient use" of energy, even had it done so, such an assertion would facially conflict with an explicit prohibition on the use of a Public Utility's "operating revenues" for "any purpose which results in a conversion from one energy source to another." <sup>18</sup> Clearly, converting, for example, natural gas-based space and water heating to electricity-based heating would constitute "conversion from one energy source to another." as defined in the amendment. Because the BEPs aim to convert energy sources, any argument that the BEPs are permissible as a conservation measure must fail.

The plain language of the state constitution, the legislative history surrounding the amendment of the state constitution, as well as its interpretation by both the Washington Supreme Court and the Attorney General, shows that the expenditure of utility funds to ratepayers pursuant to section 16 or 17 of the Bill would constitute a gift of public funds. Simply put, there is no contrary authority to suggest otherwise.

Furthermore, the gifts contemplated by the Bill are of the type consistently found violative of the state constitution. While Article 8, sections 5 and 7 prohibit the gifting of state funds to private

<sup>15</sup> Id. at \*4 (citing Voters Pamphlet 12 (1988)).



<sup>&</sup>lt;sup>12</sup> *Id.* at \*4.

<sup>&</sup>lt;sup>13</sup> Washington Extension of Energy Conservation Financing, HJR 4223 (1988) was the legislatively referred constitutional amendment that amended article 8, section 10 of the state constitution to make it effectively permanent.

<sup>&</sup>lt;sup>14</sup> Wash. AGO 2001 NO. 7 (Wash. A.G.), 2001 WL 1250134 at \*4 (citing HJR 4223, Senate Floor Debate (March 5, 1988)).

<sup>&</sup>lt;sup>16</sup> RCW 43.19.670(2).

<sup>&</sup>lt;sup>17</sup> Wash. AGO 2001 NO. 7 (Wash. A.G.), 2001 WL 1250134 at \*4.

<sup>&</sup>lt;sup>18</sup> Wash. AGO 2001 NO. 7 (Wash. A.G.), 2001 WL 1250134 at \*4

AVISTA

entities,<sup>19</sup> the court has accepted that when the "benefit to an individual is only incidental to and in aid of the public benefit, no unconstitutional gift has occurred."<sup>20</sup> Here the benefit to the individual is more than merely incidental. The improvements to ratepayer property financed by the BEPs remain with the ratepayer. The provision of public funds through incentives and rebates to ratepayers' for the installation of consumer-owned energy conversion equipment benefits the ratepayer: the *public benefit*, decreased greenhouse gas emissions, is incidental. To illustrate, imagine instead if the Bill contemplated making improvements to public infrastructure to achieve its goals. This would primarily produce a public benefit with merely incidental benefit to individuals. Instead, the Bill has this reversed.

The Washington Supreme Court recently reiterated the test for a gift of public funds in violation of article 7.<sup>21</sup> "[A] gift is a transfer of property without consideration and with donative intent."<sup>22</sup> First, the court asks whether the funds being expended to carry out a fundamental purpose of government.<sup>23</sup> If not, then the court determines whether consideration was received by the public for the expenditure and "the donative intent of the appropriating body."<sup>24</sup> The use of public funds for incentives and rebates contemplated by the BEPs fails both of these prongs.

A "fundamental government purpose" is a more narrow category than simply a public purpose.<sup>25</sup> It is not enough that a public purpose is aided by the expenditure, it must be in pursuit of a function that it is generally expected that the government will provide. Examples of this include

<sup>24</sup> Peterson v. State, 460 P.3d 1080, 1083–84 (Wash. 2020).

<sup>&</sup>lt;sup>19</sup> Wash. Const. art. 8, §§ 5 & 7.

<sup>&</sup>lt;sup>20</sup> *Tacoma v. Taxpayers*, 108 Wn.2d 679, 705 (1987); *see also CLEAN v. State*, 130 Wash.2d 782, 798 (1996) as amended (Jan. 13, 1997) ("The manifest purpose of these provisions ... is to prevent state funds from being used to benefit private interests where the public interest is not primarily served.") (quoting *Japan Line, Ltd. v. McCaffree*, 88 Wash.2d 93, 98 (1977)). <sup>21</sup> *Peterson v. State*, 460 P.3d 1080, 1083–84 (Wash. 2020).

 <sup>&</sup>lt;sup>22</sup> Id. (citing Gen. Tel. Co. of Nw., 105 Wash.2d at 588, 716 P.2d 879 (footnote omitted) (quoting Louthan v. King County, 94 Wash.2d 422, 428, 617 P.2d 977 (1980))).
 <sup>23</sup> Id.

<sup>&</sup>lt;sup>25</sup> See CLEAN v. State, 130 Wash. 2d at 798 ("Although we have concluded above that a *public purpose* is served by construction of a baseball stadium, it cannot be seriously contended that the development of a baseball stadium for a major league team is a *"fundamental purpose"* of state government.") (emphasis added); *State ex. rel. O'Connell v. Port of Seattle*, 65 Wash.2d 801, 803-06 (1965) (rejecting an argument that expenditures by the Port of Seattle to entertain or "host" shippers were not public gifts because the events served a public purpose of promoting the port on the basis that even a "useful," "legitimate" or "good" purpose because "[t]his court has rejected the theory that the character of a gratuitous expenditure is altered by the purpose it is intended to serve.").

policing,<sup>26</sup> protecting minor children,<sup>27</sup> conducting a special election on a referendum measure,<sup>28</sup> "the preservation of the public health,"<sup>29</sup> "disposal of solid waste,"<sup>30</sup> acquiring real property for public use,<sup>31</sup> and providing assistance to individuals and businesses to prepare for natural disasters.<sup>32</sup> In all of these examples, 1) there is a history of the government performing these functions: policing, providing waste removal, exercising imminent domain, etc. Contrast this with examples where a fundamental government purpose was not served, such as building a parking garage for a business district,<sup>33</sup> providing funds to a private corporation for an agricultural fair,<sup>34</sup> "development of a baseball stadium for a major league team,"<sup>35</sup> or purchasing real property for the purpose of reselling it to a private party.<sup>36</sup> In each of these examples, private parties are the beneficiaries of funds spent outside of the core, fundamental purposes of government: building a mall parking garage, funding a private fair, building a major league baseball stadium, or acquiring real estate for private parties. Similar to these examples, providing funding to ratepayers for the purpose of converting natural gas-fueled appliances with electrical equipment is not "a fundamental government purpose." In fact, cutting against a conclusion that the BEPs even serve a public purpose is the language of the Bill itself: to adopt a BEP a Public Utility must only find that the BEP would accomplish "net benefits to the utility," not to the public at large.<sup>37</sup>

- 8, section 7 of the Washington Constitution.") (internal citations omitted).
- <sup>31</sup> In re Recall of Burnham, 194 Wash.2d 68, 78 (2019).

<sup>&</sup>lt;sup>37</sup> See HB 1084 at § 17; *id.* at § 17(1) (a PUD may adopt a BEP upon a finding that it "will provide net benefits to the utility.").



<sup>&</sup>lt;sup>26</sup> Hudson v. City of Wenatchee, 94 Wn. App. 990 (1999) (police may unlock vehicles for motorists who have locked themselves out as part of their community caretaking function).
<sup>27</sup> Johnson v. Johnson, 96 Wn.2d 255, 263-64 (1981) ("[I]n light of this State's historical and continuing involvement in matters of child support and custody, we believe [the statute authorizing collection of child support] furthers a 'recognized public function' and, thus, is exempt from the strictures of article 8, section 5.").

<sup>&</sup>lt;sup>28</sup> Brower v. State, 137 Wn.2d 44, 62 (1998).

<sup>&</sup>lt;sup>29</sup> Hudson, 94 Wn. App. at 995.

<sup>&</sup>lt;sup>30</sup> *Citizens for Clear Air v. City of Spokane*, 114 Wn.2d 20 (1990) ("Disposal of solid waste is a recognized governmental function. Thus, as a matter of law, Spokane's contract with Wheelabrator for the disposal of solid waste is not a gift of public monies in violation of article

<sup>&</sup>lt;sup>32</sup> Citizens Protecting Res. v. Yakima Cty., 152 Wn. App. 914 (2009) (providing relocation assistance to businesses for flood control purposes).

<sup>&</sup>lt;sup>33</sup> *CLEAN v. Citizens Realty Co.*, 133 Wn.2d 455, 469 (1997) (finding it "highly questionable that the building of a parking garage for a business district serves a "fundamental purpose" of government" and turning to examine whether there was donative intent).

<sup>&</sup>lt;sup>34</sup> Johns v. Wadsworth, 80 Wash. 352, 355 (1914).

<sup>&</sup>lt;sup>35</sup> *CLEAN v. State*, 130 Wash. 2d 782, 798 (1996) ("Although we have concluded above that a public purpose is served by construction of a baseball stadium, it cannot be seriously contended that the development of a baseball stadium for a major league team is a "fundamental purpose" of state government.")

<sup>&</sup>lt;sup>36</sup> Lassila v. City of Wenatchee, 89 Wash.2d 804, 810-11 (1978).

When the funding does not serve a fundamental government purpose, the court next looks for "donative intent."<sup>38</sup> Here, donative intent is found because the BEPs' rebates and incentives are clearly intended to provide individual ratepayers with public funds.

When the court finds "donative intent," it next looks to the adequacy of the consideration and looks for more than mere legal sufficiency.<sup>39</sup> Here, the government retains no property interest in consumer-owned electrical appliances facilitated by BEPs and so the sole possible "consideration" would be the accomplishment of "net benefits to the utility."<sup>40</sup> However, the court has held that "[a]n expenditure is for a public purpose when it confers a benefit of reasonably general character to a *significant part of the public*…"<sup>41</sup> Unquantified "net benefits to the utility" do not confer a benefit to a significant part of the public and is therefore insufficient to constitute a public purpose or consideration for the expenditure of public funds. Article 8, sections 5 and 7 were meant "to prevent state funds from being used to benefit private interests where the public interest is not primarily served."<sup>42</sup> Here, the Bill primarily serves select individual ratepayers, incidentally serves the utilities, and fails to "confer a benefit of reasonably general character to a significant part of the public," let alone "primarily" serve the public interest. Accordingly, the expenditure of utility funds to ratepayers pursuant to section 16 or 17 the Bill would violate the state constitution's prohibition on the gifting of public funds.

Question 2 - If a municipal electric utility or public utility district adopted a plan complying with section 19 or 21, respectively, to reduce its greenhouse gas emissions or achieve net-zero emissions, would the expenditure of utility funds for the purpose of achieving quantifiable and verified reductions in greenhouse gas emissions from homes and businesses receiving retail electric service from the utility be permissible under Washington law, including the state constitution?

No, the expenditure of public funds to individual ratepayers to reduce Public Utilities' greenhouse gas emissions or to achieve net-zero emissions would be an impermissible gift of public funds in violation of the state constitution. Section 19 and 21 contemplate the use of BEPs by municipal electric utilities and public utility districts in aid of reducing greenhouse gas emissions. As explained in the previous answer, any incentive, rebate, or loan to ratepayers to facilitate their purchase of equipment to transition to electric power would be an impermissible gift of public funds in violation of the state constitution. Additionally, any incentive, rebate, or loan to ratepayers to reduce greenhouse gases must fall within the narrow exception to "use public moneys or credit derived from operating revenues from the sale of… energy… to assist the owners of structures or equipment in financing the acquisition and installation of materials and equipment for the *conservation or more efficient use of… energy…* in such structures or

<sup>&</sup>lt;sup>42</sup> Id. (quoting Japan Line, Ltd. v. McCaffree, 88 Wash.2d 93, 98 (1977)).



<sup>&</sup>lt;sup>38</sup> CLEAN v. City of Spokane, 133 Wash.2d 455, 469 (1997).

<sup>&</sup>lt;sup>39</sup> *Id.* at 469.

<sup>&</sup>lt;sup>40</sup> See HB 1084 at §§ 16, 17; *id.* at §§ 16(1), 17(1) (a Public Utility may adopt a BEP upon a finding that it "will provide net benefits to the utility.").

<sup>&</sup>lt;sup>41</sup> *CLEAN v. State*, 130 Wash.2d at 793.

equipment."<sup>43</sup> Absent a constitutional amendment to allow the gifting of public funds to ratepayers for the purpose of reducing greenhouse gas emissions, rebates or incentives under the BEPs in Section 19 and 21 of the Bill are unconstitutional. Because the Bill authorizes a Public Utility to consider its greenhouse gas emissions when contemplating certain decisions, it may be lawful after the Bill's enactment for a Public Utility to improve its own facilities for the purpose of reducing greenhouse gas emissions. However, the Bill's grant of statutory authority cannot overcome the constitutional deficiencies to allow gifts of public funds.<sup>44</sup>

The Washington Supreme Court's decision in *Okeson* is consistent with this analysis.<sup>45</sup> In Okeson, the Court considered ratepayer claims that Seattle City Light's ("City Light") greenhouse-gas offset contracts constituted impermissible spending of ratepayer funds on a nonutility purpose.<sup>46</sup> To determine whether Seattle City Light had the authority to use ratepayer funds to purchase carbon offsets, the Court focused its analysis on whether the purchases served a proprietary utility function within the implied powers of City Light's enabling statute.<sup>47</sup> The Court found that the purchase of carbon offsets did not serve a proprietary utility function, but rather a general government purpose.<sup>48</sup> Since City Light lacked the statutory authority to spend ratepayer funds in pursuit of mere general government purposes, the Court concurred with plaintiffs and found that "City Light lacked authority to use ratepayer money for the offset contracts because they are neither proprietary in nature nor sufficiently related to the purpose of supplying electricity."49 The Court noted that plaintiffs' third amended complaint also claimed "that City Light was negotiating or considering new GHG ["greenhouse gas"] mitigation contracts that would ... constitute illegal gifts of public funds ..."<sup>50</sup> However, the Court did not need to reach that constitutional issue, since it determined first that City Light lacked the statutory authority to institute the offset contracts.<sup>51</sup>

Sections 18 through 21 of the Bill would recognize greenhouse gas mitigation efforts as permissible proprietary utility functions in an effort to change the outcome the Court came to in *Okeson*.<sup>52</sup> The constitutional infirmities of sections 19 and 21, however, cannot be rectified

- <sup>47</sup> *Id.* at 448-49.
- <sup>48</sup> *Id.* at 449.
- <sup>49</sup> *Id.* at 453.
- <sup>50</sup> *Id.* at 443.
- <sup>51</sup> See, *id.* at 453.

<sup>&</sup>lt;sup>52</sup> See HB 1084 at §§ 18-21; see also id. at § 18 ("The legislature declares that RCW 35.92.430 is intended to reverse the result in *Okeson v. City of Seattle* (January 18, 2007), by expressly granting municipal utilities the statutory authority to engage in mitigation activities to offset their utility's impact on the environment.").



<sup>&</sup>lt;sup>43</sup> Wash. Const. art. VIII, § 10 (emphasis added).

<sup>&</sup>lt;sup>44</sup> The legislature is incapable of altering the meaning of constitutional language through regular legislation. *Tacoma v. Taxpayers*, 108 Wash. 2d 679, 688 (1987) ("the Legislature cannot define what is and is not a proscribed gift or loan under the state constitution") (citing *Scott Paper Co. v. Anacortes*, 90 Wash.2d 19, 33, 578 P.2d 1292 (1978)).

<sup>&</sup>lt;sup>45</sup> Okeson v. City of Seattle, 159 Wash. 2d 436 (2007).

<sup>&</sup>lt;sup>46</sup> *Id.* at 451.

through a grant of statutory authority. The Court in *Okeson* ruled on a statutory basis and did not address the constitutional question of whether the expenditure of ratepayer funds (in that case the purchase of carbon offsets) was *also* an impermissible gift of public funds. The *Okeson* decision is not instructive of how the Court would analyze the Bill's constitutionality and amending the statutory authority of Public Utilities is insufficient to render the incentives and rebates of BEPs under sections 91 and 21 constitutional. The Court would conduct the analysis explained above in the answer to Question 1 and find that the BEPs, as contemplated in sections 19 and 21 of the Bill, violate the constitutional prohibition on the gifting of public funds.

# Question 3 - Does the proposed legislation allow a municipal electric utility or public utility district to expend utility funds in a manner that results in existing structures converting from one energy source to another, if consistent with a plan adopted under sections 16, 17, 19, or 21?

No. For the reasons previously stated in response to Question 1, the expenditure of public funds for the conversion of private buildings to new energy sources is prohibited by the state constitution. The constitutional prohibition on the gift of public funds does not prohibit a Public Utility from converting its own existing structures. However, the amendment explicitly limit assistance to ratepayers to conservation efforts and "[a]ny financing for energy conservation authorized by this article shall only be used for conservation purposes in existing structures and *shall not be used for any purpose which results in a conversion from one energy source to another.*"<sup>53</sup>

Avista looks forward to the opportunity to discuss this analysis with you. Feel free to reach out to Avista's Manager of Washington Government Relations John Rothlin at <u>john.rothlin@avistacorp.com</u> or 360-956-7436. John will be happy to work on scheduling a conversation at your convenience.

Best regards,

SCAL

Greg Hesler Vice President, General Counsel, Corporate Secretary and Chief Ethics / Compliance Officer Avista Corp



<sup>&</sup>lt;sup>53</sup> Wash. Const. art. VIII, § 10 (emphasis added).

### AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION:OregonCASE NO.:UG 461REQUESTER:PUC StateTYPE:Data ReREQUEST NO.:Staff – 1

UG 461 PUC Staff Data Request Staff – 104 DATE PREPARED:2/17/2023WITNESS:Kaylene SRESPONDER:Joel AnderDEPT:State & FeTELEPHONE:(509) 495-EMAIL:joel.anders

Kaylene Schultz Joel Anderson State & Federal Regulation (509) 495-2811 joel.anderson@avistacorp.com

### **REQUEST:**

For the questions below related to advertising expense, please see the definitions and descriptions in OAR 860-026-0022. For questions related to promotional activities or concessions, please see OAR 860-026-0015 & 0020.

- a. Please identify the Category A advertising expense included in the Test Year; including references to the appropriate testimony and / or exhibit pages;
- b. Please provide a work paper that shows the calculation of the Category A limit provided in OAR 860-026-0022 (3) (a);
- c. If the Test Year Category A advertising expense exceeds the OAR 860 026-0022 (3) (a) limit, please provide support for including the additional expense in rates;
- d. Please identify the Category B advertising expense included in the Test Year; including references to the appropriate testimony and / or exhibit pages;
- e. For any Category C advertising expense included in the Test Year revenue requirement that is associated with a promotional activity or a promotional concession program, please provide a summary table that includes:
  - i. A description of the activity or program, and justification for inclusion into rates;
  - ii. A breakout of the related expense by labor & non-labor; and
  - iii. The FERC and internal utility account to which the expense will be booked and include references to appropriate exhibit pages.
- f. Please identify any other budgeted advertising expense for the test year that will NOT be included in base rates, including below-the-line or nonutility expense, or advertising expense expected to be collected through a tariff. Please include how the expense is allocated between the categories identified in

OAR 860-026-0022(2). Please describe the activities and associated expense (broken out by labor & non- labor) associated with marketing research and sales activities (include fuel switching and retention of customers) that is included in the test year. Please include references to the testimony and exhibits, and to which FERC and internal utility accounts this expense is booked.

#### **RESPONSE:**

a. Please see Staff\_DR\_104 Attachment A section MR-AD-1 through MR-AD-2.

The Company spent approximately \$70,293 for Category A advertising. The Company determined that the Category A limit was approximately \$136,335, so there was no adjustment

made. Please see Staff\_DR\_104 Attachment A sections MR-AD-1 through MR-AD-2. Workpaper MR-AD-2 includes detailed listings of advertising costs, separately identified for Category A.

- b. Please see Staff\_DR\_104 Attachment A section MR-AD-1, for a calculation of the Category A limit provided in OAR 860-026-0022 (3)(a).
- c. The test year Category A advertising expense did not exceed the OAR 860-026-0022 (3)(a) limit included in the test. Please see Staff\_DR\_104 Attachment A, MR-AD-1 through MR-AD-2, for the analysis of the Category A expenses.
- d. Please see Staff\_DR\_104 Attachment A, MR-AD-3 for all Category B advertising expenses included in the base year. There was \$153,607 of Category B expenses included in the Base year.
- e. No Category C advertising expenses were included in the forecasted test year.
- f. The Company has not included in its filing any political advertising expenses (Category D Expenses).

The Company also provides detail transactions for DSM expenses in a quarterly report filed by Avista and audited by the Oregon PUC.

### Native Excel Spreadsheet

324 Staff\_DR\_104 Attachment A.xls

Adjustment No. 1.02

Workpaper Ref. MR-AD-1

#### AVISTA UTILITIES OREGON JURISDICTION TWELVE MONTHS ENDING September 30, 2022 MISC. RESTATING ADJUSTMENT - ADVERTISING

Purpose: Remove Category A Advertising Expenses Over the Allowed Limit.

		Categ	ory A Expe	nses		1
				Total	Oregon	
FERC ACCOUNT	CD AA	GD AA	GD OR	System	Allocation	_
908000 - Customer Service & Info - Advertising				-	-	-
909000 - Info and Instruct Advertising Expense			70,293	70,293	70,293	-
912000 - Sales Expenses - Demonstrating & Selling				-	-	-
910000 - Cust SVC & Info Exp-Misc	-			-	-	-
920000 - Admin & General Salaries				-	-	-
921000 - Office Supplies & Expenses				-	-	-
930200 - Misc General Expense	-			-	-	-
	-	-	70,293	70,293	70,293	MR-AD-2
Category A Limit:						
Proposed Retail Revenues 09.2022 AMA Balance	109,068,000					110,158,000 ROO
Limit (1/8 of 1%)	0.125%					(6,202,000) Eliminate Adder Schedules
	136,335					(2,541,000) PF Revenue
Oregon Allocation of Category A Costs	70,293					7,653,000 GRC - Estimated before finalizing adjustme
Adjustment - To Remove Category A Costs over Limit	-					109,068,000

#### Notes:

The level of Oregon allocated Category A expenses are below the Retail Revenue limit. Therefore, an adjustment is not necessary.

Prep by:	1st Review:
----------	-------------

Date: 7/12/2023 Mgr.

Mgr. Review:

Adjustment No.

Workpaper Ref. MR-AD-2

Sum of Transaction	Amount		Service	Jurisdiction	
			GD	GD Total	Grand Total
Category	FERC Account	FERC Account Description	OR	1	
CAT A	909000	INFO AND INSTRUCT ADVERT EXP	70,293	70,293	70,293
	909000 Total		70,293	70,293	70,293
Grand Total			70,293	70,293	70,293

Prep by:	_ 1st Review:
Date: 7/12/2023	Mgr. Review:

Sum of Transa	action Amount		Service	Jurisdiction	
			GD	GD Total	Grand Total
Category	FERC Account	FERC Account Description	OR	1	
CAT B	909000	INFO AND INSTRUCT ADVERT EXP	153,607	153,607	153,607
	909000 Total		153,607	153,607	153,607
CAT B Total			153,607	153,607	153,607
Grand Total			153,607	153,607	153,607

MINA GENSALARES AL	AG4 - Products and Services AG4 AG4 - Products and Services AG4 AG4 - Products and Services are	202112 09900 202202	Schulture         Journalisme         Annualisme         Annuali	Labor OPER OPER	021 92000 Labor 022 92000 Labor	343 Require Panol - NJ PA 343 Require Panol - NJ PA	2 00 05 1964.07	577.96 259.92 At 728.94 551.45	this Activities-Common 101	- liber
MINA GENSALARES AA CO	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4 AG4.	202110 09900 202110 09900 202200	H2 Labor Cost USD	Labor OPER Labor OPER	221 820000 Labor 222 820000 Labor	340 Recular Parcel - NJ PA 340 Recular Parcel - NJ PA	2582.52 14.226 9967.67 11.500 9	20158 A0 2044 1 324 A0 9 545 7	ein Activities-Common 001	angang kalence tamine bandar baran bara bara bara bara bara bara b
MINA CENSALARES AA CO	Control (1)     Contro (1)     Control (1)     Control (1)     Control (1)     Control (1	202203 0990	H2 Labor Cost USD	lange en	<table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-container><table-container><table-container><table-container><table-container><table-container><table-container><table-container></table-container></table-container></table-container></table-container></table-container></table-container></table-container></table-container></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row>	340 Recular Parcel - NJ PA 340 Recular Parcel - NJ PA	1 2010 0 4642 0		Pegachangenitian Communitian Achiliana Carrina (All Carriana) (All	labor labor
THE SUPPLES A EXPENSES AM CO	Add - Products and Services Add	202206 0990	INC LINE CONTINU Protoma Incluse LE INCOLE RUMPEL-COSTCO WHEE #773 Continue Incluse 16 INCOLE RUMPEL-PRAGMYTC MRRETING LLC	Employee Exp 9529439-CC OPER	2022 921000 Non-Labor	225 Employee Misc Expenses AP	219.81 155.39	44.46 19.96 Ac	min Activities-Common 001	6445 CORP CREDIT CARE NO C 6445 CORP CREDIT CARE NO C
COUSTACEX AN CO	AS4 - Products and Services AS4 AS4 - Doducts and Services AS4	202110 0990	PIS Labor ContUSD	Labor OPER	221 905000 Labor	340 Require Payrol - NJ PA	2 309 53 1 204 72 1 600 70 800 10	789.05 215.76 Ki 559.75 214.66 Ki	ndela Mover 001	libor libor
IC CUST ACLEX AA CD	Add - Products and Services Add	202205 0990	16 Labor Cost USD 215 Labor Cost USD 16 Destruction LID LID Two LIDDest day PD	Labor OPER Consideration (CPER)	2022 905000 Labor 2022 905000 Labor	340 Regular Payrol - NJ PA	1,424.28 7742.9 0,742.9	487.97 192.41 Ka	ndela Mover 001	internet in the second
NERAL ADVERTISING EXPENSE AA GD	AG4 - Products and Services. AG4	202111 0990	N2 Pachase incides LS RNS Bill Inset	Contractor 20025 OPER	2021 930100 Non-Labor	COD Professional Services AP	600	413. 197. Ve	Juntary RNG Program 001	2015 HANNA & ASSOCIATE NEL C
TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202209 09900	III Future model to Del Colorad IDN 107 Later Cost USD	Labor OPER	222 82100 Nor-Labor 222 92100 Labor	101 Advetticio Exernes AP 340 Readir Paytol - NJ PA 340 Regular Paytol - NJ PA	-1.116. 71.26 50.38	-2.141.41 - 404.19 VC 56.41 - 6.42 Te	John Houses	Inter NATIONAL COLOR & NET O
FICE SUPPLES & EXPENSES AN CD	AG4 - Products and services AG4 AG4 - Products and Services AG4	202205 0990	107 Labor Cost USD	Labor OPER	222 92100 Labor 222 92100 Labor	343 Haguar Paylol - NJ PA 343 Rasular Paylol - NJ PA	71.26 50.38	16.41 6.47 Te	econ Services 001	labor labor
FICE SUPPLIES & EXPENSES AA CD FICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202209 09900	107 Labor Cost USD 107 Labor Cost USD	Labor OPER	2022         147 9500         Labor           2022         147 9500         Labor           2022         147 9500         Labor           2022         147 9500         Labor           2020         140 9500         Labor           2020         140 9500         Labor           2020         140 9500         Labor           2020         140 9500         Labor           2021         140 9500         Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	71.26 50.38 71.26 50.38	54.41 6.47 Te 54.41 6.47 Te	econ Services 001 Jecon Services 001	labor labor
PLOYEE PENSIONS & BENEFITS N AA CD PLOYEE PENSIONS & BENEFITS N AA CD	A64 - Products and Services A64 A64 - Products and Services A64	202209 09900	11 Purchase Inscises LS Cab Fare, Back to Hotel 11 Purchase Inscises LS Cab Fare, Abbit to Algort	Engineer Exp E17857501 OPER Engineer Exp E17857501 OPER	022 920102 Non-Labor 022 920102 Non-Labor	235 Employee Mac Expenses AP 235 Employee Mac Expenses AP		4.53 2.04 A	and G Common Training 001	112591 Barrington Andrew Th Not CP 112591 Barrington Andrew Th Not CP
MINA GENSALARES AA CD MINA GENSALARES AA CD	A64 - Products and Services A64 A64 - Products and Services A64	202205 09901 202207 09901	IBD Labor Cost USD Labor Cost USD	Labor OPER Labor OPER	022 92000 Labor 022 92000 Labor	343 Require Panol - NJ PA 343 Require Panol - NJ PA	1.907.00 1.360.70 476.97 207.19	385.92 173.18 Co 96.48 40.3 Co	Joany Utility Initiatives 001	labor labor
MINA GENISALARES AA CD	AG4 - Products and Services. AG4 AG4 - Droducts and Services. AG4	202111 09900	90 Labor Cost USD	Labor OPER	021 92000 Labor	340 Reputer Pantal - NJ PA 340 Reputer Pantal - NJ PA	1.020.49 756 9.540 2.404.05	211.19 94.98 Co 734.42 200.97 Ar	margen Using Marines. Or Margen Characteristics (Construction) In Articles Construction (Construc- In Articles Construction (Construc- In Articles Construction) In Articles Construction (Cons- International Construction) In Articles Construction (Con- International Construction) In Articles Construction (Con- International Construction) In Articles Construction (Con- International Construction) International Construction (Con- International Construction) International Construction International Construction Inte	l hidor bido
MINA GENISALARES AA CD	AG4 - Products and Services AG4	202206 09900	62 Labor CostUSD	Labor OPER	022 920000 Labor	340 Regular Payrol - NJ PA	11,129 7,607.91	2,051,05 1,010,21 Ad	nin Activities-Common 001	labor
MINA GENSALARES AA CD	AG4 - Products and Services. AG4	202208 0990	102 Labor Cost USD	Labor OPER	2022 920000 Labor	340 Regular Payrol - NJ PA	7,313.58 5,170.34	1,479.39 663.85 Ad	min Activities-Common 001	libbar libbar
MINA GENSALARES AA CD	AG4 - Products and Services AG4	202203 0990	102 Labor Cost USD	Labor OPER	2022 920000 Labor	240 Recular Panol - NJ PA	2.026.06 1.402.75	409.55 182.96 Ac	Jain Activities-Common 001	libor libor
MINA GENSALARES AA CD	AG4 - Products and Services AG4	202208 09900	162 Labor Cost USD	Labor OPER	222 92000 Labor	343 Require Parcel - NJ PA	1.376 974.12	278.72 125.08 Ad	min Activities-Common 001	abor abor
TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and services AG4 AG4 - Products and Services AG4	202207 0990	102 Purchase Incole RLMPEL-STARGUCKS STORE 2019	Engiver Eig 667439-CC OPER	222 920000 Labor 222 921000 Non-Labor	215 Employee Business Meals AP	47.2 41.65	-17.64 -7.91 Ad	mit Activities-Common 001	6445 CORP CREDIT CARE Not CA
MINA GENSALARES AA DD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202202 0990 202112 0990	300 Labor CostUSD 115 Labor CostUSD	Labor OPER Labor OPER	022 920000 Labor 021 905000 Labor	340 Repular Payroll - NJ PA 340 Regular Payroll - NJ PA	2.072.53 1,225.3 664.37	583.01 296.11 Ci 422.04 168.89 Ki	nmon-Company Come 001 edela Mover 001	libor libor
IC CUST AC EX AA CD MINA GENSALARIES AA CD	A54 - Products and Services. A54 A54 - Products and Services. A54	202202 0990 202201 0990	715 Labor Cost USD IABor Cost USD	Labor OPER Labor OPER	022 905000 Labor 022 920000 Labor	240 Requiar Partol - NJ PA 240 Regular Paytol - NJ PA	2.148.36 1.120.59 3,122.63 2,208.25	736.05 291.72 Ki 631.64 283.54 Ri	stela Mover 001 ainees Transformation ( 001	ibor ibor
TICE SUPPLIES & EXPENSES AA CD TICE SUPPLIES & EXPENSES AA CD	A64 - Products and Services A64 A64 - Products and Services A64	202112 09901 202202 09901	167 Labor Cost USD 167 Labor Cost USD	Labor OPER Labor OPER	021 921600 Labor 022 921600 Labor	343 Require Panol - NJ PA 343 Require Panol - NJ PA	71.26 49.88 71.26 50.38	14.75 6.63 Te 14.41 6.47 Te	acon Services 001 Jecon Services 001	libor libor
TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services AG4 AG4 - Droducts and Services AG4	202110 09900	167 Labor Cost USD	Labor OPER	021 921600 Labor	343 Regular Payrol - NJ PA 343 Regular Payrol - NJ PA	71.26 49.88	54.75 6.63 Te	acon Services 001	labor bibor
TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services AG4	202208 09900	107 Labor Cost USD	Labor OPER	022 921600 Labor	340 Regular Payroll - NJ PA	71.26 50.38	54.41 6.47 Te	econ Services 001	liber
MINA GENSALARES AA CD	AG4 - Products and Services AG4	202201 09900	Image: Control (Control (Contro)(Control (Control (Control (Control (Control (Control (Control (C	Labor OPER	2022 920000 Labor	210 Recular Panol - NJ PA	1,303,35 968,05	276.99 124.3 Ci	Jacany Ubility Initiatives 001	libor libor
MINA GENSALARES AA CD	AG4 - Products and Services AG4	202203 0990	IRO Labor Cost USD	Labor OPER	222 92000 Labor	343 Require Parcel - NJ PA	1.790.76 1.205.98	362,23 162,55 Cr	anoany Utility Initiatives 001	abor abor
MINE GENSALARES AA CD	AG4 - Products and services AG4 AG4 - Products and Services AG4	202201 0990	NE LEE CONTRO NE Lebr Control	Labor OPER	222 \$20000 Labor 222 \$20000 Labor	343 Haguar Paylol - NJ PA 343 Rasular Paylol - NJ PA	5,007.7 2,000.5	241.82 108.53 Ad	mit Activities-Common 001	libor libor
MINA GENSALARES AA CD MINA GENSALARES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202207 09900 202111 09900	162 Labor Cost USD 162 Labor Cost USD	Labor OPER Labor OPER	022 920000 Labor 021 920000 Labor	340 Repular Payrol - NJ PA 340 Regular Payrol - NJ PA	4.418.76 3.123.85 4.518.87 3.163.12	893.83 401.08 Ad 935.18 420.57 Ad	nit Activities-Common 001	libor libor
MINA GENSALARES AA CD TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202201 09900 202207 09900	162 Labor Cost USD 162 Purchase Invoices US Artans, Aaska 0277827530796, Desamforce Conference	Labor OPER Employee Eag. E 1725/801 OPER	022 92000 Labor 022 92100 Non-Labor	240 Recular Panol - NJ PA 205 Airfare AP	1039.24 2.148.59 317 224.54	614.78 275.87 Ad 64.16 28.79 Ad	nin Activities-Common 001	68114 Magainix, Kally Edwar Not CF
TICE SUPPLIES & EXPENSES AN CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AC4	202207 09900	Purchase Incides LG: Conference: Descriptions Conference     Microllaneous Turners 2/109 RCCH av #000550980021 109-RCCH	Mathem is a result         Organization         Organization           Result         6 \$15151         Organization           Internet         9 \$100         Organization           Internet         9	Barry Control         Barry Control         Barry Control           Barry C	11         Construction         PA           201         Construction		210.21 94.30 Ad 0.55 0.05 Ad	The A-Elime - Cellinolo, (Bo) The A-Elime - Cellinolo, (Bo) Tellin - Activite - Centre on (Ori Tellin - Activite - Centre on (Ori models Mower Ori Models Mower Ori Models - Origonator, Control - Origonator, More - Centre - Origonator, Origonator, More - Origonator, Control - Origonator, Martina - Model - Origonator, More - Origonator, Control - Origonator, More - Origonator, Control - Origonator, More - Origonator, Control - Origonator, More - Origo	68114 Macalakik Kally Edwar Net CK 68114 Macalakik Kally Edwar Net CK Net CK
MINA GENSALARES AA CO	AS4 - Products and Services AS4 AS4 - Doducts and Services AS4	202206 09900	200 Labor Cost USD	Labor OPER	022 \$20000 Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	15,321.24 10,821.36	3,099.18 1,390.7 Cr	Jumon-Company Come 001	libor Libor
	Add - Products and Services. Add Add - Products and Services. Add	202207 0990	P15 Labor Cost USD	Labor OPER	2022 900000 Labor	340 Regular Payroll - NJ PA	2 100 m2 1,114.36 986 514.32	200.11 Ki 207.62 133.9 Ki	adela Mover 001	461         0.009 00001 (MI to 100 Minute)           662         0.009 00001 (MI to 100 Minute)         0.000 Minute)           663         0.009 00001 (MI to 100 Minute)         0.000 Minute)           664         0.000 Minute)         0.000 Minute)           665         0.000 Minute)         0.000 Minute)           661         0.000 Minute)         0.000 Minute)           662         0.000 Minute)         0.000 Minute)           663         0.000 Minute)         0.000 Minute)           664         0.000 Minute)         0.000 Minute)
TSEE SERVICES EMPLOYED AA CD	Abd - Products and Services A54 A54 - Products and Services A54	202209 0990	13 Januar Josef UBL 13 Punchase Involves US 6-Marth Edension	Labor OPER Centralized As MN8000000139 OPER	2022 822010 Labor 2022 822010 Non-Labor	Anno manifold Palvices NV PA	1.040.02 542.00 41.000.07 20.450.25	25639 14134 Ki 842833 3.782.09 Ac	alications Program Ease 001	111840 LITLITY CONSUMER. Not CP
MINA GENSALARES AA CD MINA GENSALARES AA GD	A54 - Products and Services. A54 A54 - Products and Services. A54	202111 0990	Ma Labor Cont USD	Labor OPER Labor OPER	821 820000 Labor 821 820000 Labor	343 Haguar Paytoli - NJ PA 340 Recular Paytoli - NJ PA	2,660.37 1,862.2 767.65	550.56 247.61 Bu 528.4 229.25 Vo	uness stateformation ( 001 suntary RNG Program 001	labor labor
NEHAL ALVERTISING EXPENSES AA CD	A54 - Products and Services A54 A54 - Products and Services A54	202201 0990 202209 0990	mz Hustnase molase LS US-Tax- OFFSPCK-OFFSET 107 Labor Cost USD	Voucher 25101 OPER Labor OPER	2022 92100 Non-Labor 2022 921900 Labor	arro Advertising Expenses AP 340 Recular Pavroli - NJ PA	0, 77.20, 50.30 77.20, 50.30 10.302.43, 720.50 3.308, 274.62 1.416.62, 626.54 6.002.56, 426, 6.003.56, 465.2	0. 0. Vo 56.41 0.47 Te	antary RNG Program 001 lecon Services 001	BBB NATIONAL COLOR G Not CA
TICE SUPPLIES & EXPENSES AA. CD MINIE GENISALARES AA. CD	A54 - Products and Services. A54 A54 - Products and Services. A54	202202 0990 202207 0990	167 Labor Cost USD 986 Labor Cost USD	Labor OPER Labor OPER	022 821600 Labor 022 920000 Labor	340 Repular Payroli - NJ PA 340 Regular Payroli - NJ PA	71.26 50.38 1,022.43 720.58	56.41 6.47 Te 209.04 92.81 Ex	econ Services 001 ela Billing Outage 001	likor bior bior bior bior bior bior bior bi
MINA GENSALARES AA CO	AG4 - Products and Services. AG4 AG4 - Products and Services. AC4	202207 0990	165 Labor Cost USD	Labor OPER Labor OPER	022 820000 Labor 022 820000 Labor	240 Recular Payroll - NJ PA 240 Recular Payroll - NJ PA	368 274.62 1.187.62 895.54	78.58 35.26 W	Jikolace 2022 001 angany Ublity Initiatives. 004	libor ishor
MINA GENISALARES AM CO	AG4 - Products and Services AG4	202207 09900	Ido Labor Cost USD	Labor OPER	222 920000 Labor	340 Recular Payroll - NJ PA 341 Recular Payroll - NJ PA	602.50 426	121.09 54.09 CI	moany USBN Initiatives 001	labor labor
O AND INSTRUCT ADVERTIGIP OR GD	Add - Products and Services. Add Add - Products and Services. Add	202201 0680	160 Labor Cost USD	Labor OPER	2022 909000 Labor	340 Regular Payroll - NJ PA	988.10 485.2 200.55	298.55 Fi	nace Filter Reals Prop- 001	abor abor
ARE CENSALARES AR CD	Ab4 - Products and Services A54 A54 - Products and Services A54	202207 0680 202201 09900	NU LABOR GON URD	Labor OPER Labor OPER	2022 82000 Labor 2022 82000 Labor	Joh Baum Pauls         HO         PA           Joh Baum Pauls	60.00 7. (3.0.00) 3.07.51 3.07.51 3.060.20 3.060.00 3.000.000 3.000.000 3.000.0000000000	483.02 Fs 1,445.48 649.08 Ad	min Activities-Common 001	abor abor
MINA SANSALARES AA CD MINA GENISALARES AA CD	A54 - Products and Services A54 A54 - Products and Services A54	202201 09900 202206 09900	nar Labor Cont USD 62 Labor Cont USD	Labor OPER Labor OPER	2022 820000 Labor 2022 820000 Labor	240 Hacular Pavroll - NJ PA 240 Recular Pavroll - NJ PA	877.51 620.36 2.400.57 1.697.08	177.5 79.65 Ac 485.59 217.9 Ac	an Activities-Common 001 min Activities-Common 001	labor labor
MINA GENSALARES AA CO MINA GENSALARES AA CO	A54 - Products and Services A54 A54 - Products and Services A54	202205 09900 202208 09900	Haz Labor Cost USD Labor Cost USD	Labor OPER Labor OPER	82000 Labor 822 82000 Labor	340 Hagular Payroll - NJ PA 340 Recular Payroll - NJ PA	1,388.68 981.73 3,546.73 2,505.94	290.9 126.05 Ad 717.02 221.76 Ad	In Activities-Common 001 min Activities-Common 001	libor libor
MINA GENSALARES AA CO	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202112 0990	162 Labor Cost USD 162 Purchase Inscise US Artans CCL Landership Training	Labor OPER Employee Exp. (E18047502 OPER	021 92000 Labor 022 92100 Nor-Labor	343 Regular Paytoli - NJ PA 205 Aldare AP	3,652 2,556,62 722,43 011,45	755.87 339.93 Ac 198.34 65.66 Ac	nin Activities-Common 001	
TICE SUPPLIES & EXPENSES #4 CD	AG4 - Products and Services. AG4 AG4 - Products and Genuices. AG4	202206 0990	102 Purchase Incides LG Lodding, CCL Leadership Training 102 Purchase Incides LG Cap Fare, CCL Laadership Training	Ensize Ex E1647502 OPER Ensize Ex E1647502 / CED	022 821000 Non-Labor 022 821000 Non-Labor	230 Employee Lodging AP 235 Employee Misc Expenses AD	1,198,71 847,43 28,95 000	242.48 108.8 Az	nin Activities-Common 001	68154 Mecalikis, Kally Edwar Not CK 68154 Mecalikis, Kally Edwar Not CK 68154 Mecalikis Kally Edwar Not CK 111840 UTLITY CONSUMER, Not CK
TSDE SERVICES EMPLOYED M CD	AG4 - Products and Services AG4	202209 09900		Centralized As MN8000000129 OPER	222 922010 Non-Labor	661 Hostino Services AP	2047	Alian         Alian         Alian           M. Alian         2.71         2.71           M. Alian         2.72         2.71           M. Alian         2.71         2.71           M. Alian         2.71         2.71           M. Alian         2.71         2.71           M. Alian         3.71         3.71           M. Alian         3.71         3.71 <td>trais Activities Common (oth trais Activities Common (oth trais Activities Common (oth trais Activities Common (oth and Activities Common (oth activities Common (oth activities Common (oth activities Common Tailaine, doit laterar Single Common Tailaine, doit and G Common Tailaine, doit annayar, Walke Natatase, doit</td> <td>111840 UTLITY CONSUMER. Not CA</td>	trais Activities Common (oth trais Activities Common (oth trais Activities Common (oth trais Activities Common (oth and Activities Common (oth activities Common (oth activities Common (oth activities Common Tailaine, doit laterar Single Common Tailaine, doit and G Common Tailaine, doit annayar, Walke Natatase, doit	111840 UTLITY CONSUMER. Not CA
NERAL ADVERTISING EXPENSE AA GD	AG4 Products and Services AG4	202111 0990	Al2 Punchase Invoices LS RNS Bill Insert	Contractor 20425 OPEN	2021 820100 Nen-Labor	000 Professional Services AP	2,000 and 2,114.00 1,211.25	602.57 408.68 Ve	Juntary RNG Program 001	Mar Internet & Arrowsky And Ca
THE SUPPLIES & EXPENSES AN CD	Ab4 - Products and Services A54 A54 - Products and Services A54	202204 09900 202204 09900	nor Labor Cont USD	Labor OPER Labor OPER	2022 821000 Labor 2022 821000 Labor	anu nasililik Pakital - NJ PA 340 Regular Paysal - NJ PA	17.2.8 (50.3) 77.30 (50.3) 77.30 (50.3) 77.30 (50.3) 77.30 (50.3) 77.30 (50.3) 78.30 (50.3) 79.30 (50.3) 7	56.41 6.47 Te 56.41 6.47 Te	Jacon Services 001	And Person & Salah Linia Marka
FICE SUPPLIES & EXPENSES AA CD PLOYEE PENSIONS & BENEFITS N AA CD	A54 - Products and Services. A54 A54 - Products and Services. A54	202206 09900 202209 09900	107 Labor Cost USD 111 Labor Cost USD	Labor OPER Labor OPER	022 921600 Labor 022 926102 Labor	240 Requiar Partol - NJ PA 240 Regular Paytol - NJ PA	71.26 50.38 1,553.04 1,098.49	56.41 6.47 Te 256.21 141.04 A	and G Common Ttaining 001	ibor ibor
PLOYEE PENSIONS & BENEFITS N AA CD PLOYEE PENSIONS & BENEFITS N AA CD	A64 - Products and Services A64 A64 - Products and Services A64	202209 09900	Parchase Invices LS Made Dover     Parchase Invices LS Too, Househeading @ Hotel	Engineer Exp E17857501 OPER Engineer Exp E17857501 OPER	022 920102 Non-Labor 022 920102 Non-Labor	215 Employee Business Mails AP 235 Employee Misc Expenses AP	50.41 25.56 10 7.07	10.19 4.58 A	and G Common Training 001	112591 Barrindon Andrew Th Not OF 112591 Barrindon Andrew Th Not OF
PLOYEE PENSIONS & BENEFITS N AA CD RUOVEE RENSIONS & RENEFITS N AA CD	AG4 - Products and Services AG4 AG4 - Droducts and Services AG4	202209 09900	Purchase Invices LS Cab Fare, Apport to Hotel     Durchase Invices LS Cab Fare, Apport to Hotel	Engineer Exp E17657501 OPER	022 920102 Non-Labor 922 920102 Non-Labor	235 Employee Mac Expenses AP 235 Employee Mac Expenses AP	94.23 66.02	19.06 8.55 A	and G Common Training 001	112591 Earlington Andrew Th Not OF 112591 Earlington Andrew Th Not OF
MINA GENSALARES AA CD	AG4 - Products and Services. AG4	202110 09900	M0 Labor Cost USD	Determine is 4: 400000         Units           intermine is 4: 4000000         Units           intermine is 4: 4000000         Units           intermine is 4: 40000000         Units           intermine is 4: 40000000000000000000000000000000000	821 92000 Labor	340 Regular Payrol - NJ PA	2,738.7 1,917.03	566.76 254.91 Ci	mpany Utility Initiatives 001	11221 Barthon Andre 11 boot Boot Boot Boot Boot Boot Boot Boot
MINA GENSALARES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202112 0990	60 Labor Cost USD 60 Labor Cost USD	Labor OPER Labor OPER	222 R2000 Labor 221 92000 Labor	343 Hacular Panol - NJ PA 343 Recular Panol - NJ PA	1.384.51 Mill.17 596.52 410.55	121.38 54.59 Cr	moany Utility Initiatives 001	libor libor
MINE GENSALARES AA CD	AG4 - Products and services AG4 AG4 - Products and Services AG4	202202 0990	50 Labor Cost USD	Labor OPER	222 \$20000 Labor 222 \$20000 Labor	343 Haguar Paylot - NJ PA 340 Rasular Paylot - NJ PA	122.2 94.24	97.08 42.54 Ci 26.96 12.1 Ci	stoany Utility Initiatives 001	libor libor
O AND INSTRUCT ADVERTIDIP OR GD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202112 06800 202202 06800	190 Labor Cost USD 190 Labor Cost USD	Labor OPER Labor OPER	021 909000 Labor 022 909000 Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	216.94	214.84 Fe 288.55 Fe	race Filter Redic Proc- 001 mace Filter Redic Proc- 001	labor labor
TO AND INSTRUCT ADVERT EXP. OR. GD. TICE SUPPLIES & EXPENSES AA. CD.	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202209 0680 202110 09900	90 Labor Cost USD 902 Labor Cost USD	Labor OPER Labor OPER	022 909000 Labor 021 921000 Labor	260 Recular Panol - NJ PA 205 Incentive/Bonus Pay PA	436.1 2,500 1,749.95	436.1 Fs 517.38 222.67 Ad	nace Filter Reals Proc. 001 Imin Activities-Common. 001	ibor ibor
MINA GENSALARES AA CD MINA GENSALARES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202201 09900 202209 09900	162 Labor Cost USD	Labor OPER	022 92000 Labor 022 92000 Labor	340 Require Panol - NJ PA 340 Require Panol - NJ PA	2.520.7 2.488.95 2.200.63 1.598.94	712.17 219.58 Ad 457.28 205.21 Ad	nin Activities-Common 001	labor labor
MINA GENISALARES AA CD	AG4 - Products and Services. AG4 AG4 - Droducts and Services. AG4	202206 09900	162 Labor ContUSD	Labor OPER	022 92000 Labor 021 920000 Labor	340 Reputer Pantal - NJ PA 340 Reputer Pantal - NJ PA	925.78 654.48 100.05 116.29	187.27 84.00 Ad 34.96 15.46 Ad	nin Activities-Common 001	liber liber
MIN& GENSALARES AA CD	AG4 - Products and Services. AG4	202209 09900	ND Labor Cost USD	Labor OPGR	822 92000 Labor	340 Regular Payroll - NJ PA	1,353.6 956.99	273.8 122.87 Ad	min Activities-Common 001	libor
MINA GENSALARES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202110 09900	162 Labor Cost USD	Labor OPER	222 R2000 Labor 221 92000 Labor	343 Haquiar Payrol - NJ PA 343 Ragular Payrol - NJ PA	6,228.44 6,401.08 6,238.44 6,366.78	1,291.04 580.62 Ad	Imin Activities Common 001 Imin Activities Common 001	
MINA GENSALARES AA CD FICE SUPPLES & EXPENSES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202209 09900 202208 09900	102 Labor Cost USD 102 Purchase Invoices US LISA LEE-SMPCKVS ON BROADWAY	Labor OPER Emolowe Exp 976H39-CC OPER	022 82000 Labor 022 82100 Non-Labor	240 Recular Panol - NJ PA 215 Employee Business Meals AP	2.346.08 1.658.56 254.66 250.73	474.57 212.95 At 71.74 22.19 At	nit Activities-Common 001	6445 CORP CREDIT CARE Not CA
MINA GENSALARES AA CD MINA GENSALARES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202203 09900 202110 09900	200 Labor Cost USD 200 Labor Cost USD	Labor OPER Labor OPER	022 920000 Labor 021 920000 Labor	2000         Boomary Pount - 300         Point           200	MAR         MAR         MAR	Alazia         Alazia         Alazia           Mailine         Alazia         Control         Control           Mailine         Control         Control         Control           Mailine         Mailine         Solid         Solid           Mailine         Mailine         Mailine         Solid         Solid           Mailine         Mailine         Mailine         Mailine         Solid         Solid           Mailine         Mailine         Mailine         Mailine         Solid	ammon-Camaane Come (001 ailness Transformation / 001 ailness Transformation / 001 aiscons Services (001 aiscons Transice (001 and G Common Training (001 and G Common Training (001	6445 CORP CREDIT CAR NO CA AND CAR
MINA GENSALARES AA CD TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202112 09900 202111 09900	IBB Labor Cost USD	Labor OPER	021 920000 Labor 021 921600 Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	2,541 1,778.84 71.26 49.88	525.91 226.52 Bi 14.75 6.62 Te	iness Transformation ( 001 Jecom Services 001	labor
TICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services AG4 AG4 - Droducts and Services AG4	202203 09900	107 Labor ContUSD	Labor OPER	022 921000 Labor 029 92400 Labor	340 Reputer Pantal - NJ PA 340 Reputer Pantal - NJ PA	71.26 50.38 71.26 50.38	56.41 6.47 Te	econ Services 001	liber liber
TICE SUPPLIES & EXPENSES AM CD	AG4 - Products and Services AG4	202206 0990	107 Labor Cost USD	Labor OPER	022 921600 Labor	240 Recular Parcel - NJ PA	71.26 50.38	14.41 6.47 Te	acon Senices 001	ibor bior
TICE SUPPLIES & EXPENSES AA CO	A54 - Products and Services. A54	202208 0990	Ideor Cost USD     Lakor Cost USD     Into Cost USD     Into Cost USD     Portugate Incident USI Lodino. Doubletine Hatel (Conference Hatel)	Labor OPER	822 821600 Labor	343 Recular Partol - NJ PA	71.26 50.38	56.41 6.47 Te	acon Senices 001	labor
PLOYEE PENSIONS & BENEFITS N AA CD	AG4 - Products and Services. AG4	202209 0990	11 Dento Can Calo Calo Calo Cale Contenence Hotel)	Engiover Exp E 17857501 OPER	8221 820102 Non-Labor	230 Employee Lodging AP	554.47 291.98	112.16 50.33 A	and G Common Training 001	112591 Barrington Andrew Th Not CA
MINE GENERALANES AN CD	AGE - Products and Services. AGE AGE - Products and Services. AGE	202110 09900	660 Labor Cost USD 600 Labor Cost USD	Labor OPER	222 82000 Labor 221 92000 Labor	360 Recular Panol - NJ PA 360 Regular Panol - NJ PA	2.666.35 1.962.17 1,650.17 1,015.09	200.11 134.97 Co	inpany Utility Initiatives 001	abor bbor
MINA GENSALARES AA CD TO AND INSTRUCT ADVERT EXP OR GD	A54 - Products and Services. A54 A54 - Products and Services. A54	202209 09900 202111 06800		Labor OPER Labor OPER	022 920000 Labor 021 909000 Labor	340 Recular Panol - NJ PA 340 Recular Panol - NJ PA	986.04 697.08 698.23		ano occamina internet do moany Utility Initiatives 001 ampany Utility Initiatives 001 ampany Utility Initiatives 001 amaos Filter Resic Prop. 001 amaos Filter Resic Prop. 001	labor labor
O AND INSTRUCT ADVERTIGIP OR GD O AND INSTRUCT ADVERTIGIP OR GD O AND INSTRUCT ADVERTIGIP OR GD	AG4 - Products and Services AG4 AG4 - Droducts and Services AG4	202206 06800	100 Labor Cost USD	Labor OPER	022 909000 Labor	340 Regular Payrol - NJ PA	657.36	657.36 Fe	nace Filter Regic Proc- 001	labor labor
O AND INSTRUCT ADVERTIGIP OR GD	A64 - Products and Services. A54	202208 0680	190 Labor Cost USD	Labor OPER	2022 909000 Labor	343 Regular Payroll - NJ PA	1,095.6	1,065.6 Fe	mace Filter Regic Prop- 001	abor bor
O AND INSTRUCT ADVERT EXP. OR. GD	AG4 - Products and Services AG4	202209 0680	1.440         Control 0           0.440         Control 0	Contractor NV-1256 OPER	2022 909000 Non-Labor	020 Professional Services AP	341.92	348.92 Fe	mace Filter Reals: Proc. 001	SOB12 QUESTLINE INC Not CH
MINA GENSALARES AA CO	AG4 - Products and Services. AG4	202202 0990	102 Labor Cost USD	Labor OPER	202         202000         Labor           202         202000         Labor           202         202000         Labor           202         202000         Labor           202         202000         Non-Labor           202         202000         Non-Labor           202         202000         Non-Labor           202         202000         Non-Labor           202         202000         Labor           202         202000         Labor           202         202000         Labor	340 Recular Partol - NJ PA	8,501,13 6,722,48	1.923.51 863.14 Ad	min Activities -Common 001	abor abor
MINA GENSALARES AA CD	Abit - Products and Services Abit Abit - Products and Services Abit	202205 0990	na Labor Gen UBD 102 Labor Cost USD	Labor OPER Labor OPER	82000 Labor 8222 82000 Labor	ano negalati Paytot - NJ PA 340 Recular Paytoti - NJ PA	2,246 1,571.3 1,240.92 877.27	464.56 208.92 Ad 251.01 112.64 Ad	min Activities-Common 001	labor labor
MINA SANSALARES AA CD	AS4 - Products and Services. AS4 AS4 - Products and Services. AS4	202207 0990 202208 0990	Haz Labor Cost USD	Destinate in 6 (2009)         0700           Link         0700	2022         \$20000         Libor           2022         \$20000         No.4,40x           2022         \$20100         Libor           2023         \$20000         Libor           2024         \$20000         Libor           2024         \$20000         Libor           2024         \$20000         Libor           2024         \$20000         Libor	240 Haqular Paysol - NJ PA 240 Regular Paysol - NJ PA	2,549,52 2,549,52 2,520,41 2,520,41 2,520,41 2,520,41 2,520,41 2,520,41 2,520,41 4,520,		Irrace Filter Read: Proc. 001 Irrace Filter Read: Proc. 001 Irrace Filter Read: Proc. 001 Irrace Filter Read: Proc. 001 Irrace Filter Read: Proc. 001 Brith Activities-Common 001	112291 Barthata Alesse Th Nor Barthata Alesse Th Nor Barthata Bart
MINA GENSALARES AA CD MINA GENSALARES AA CD	AS4 - Products and Services AS4 AS4 - Products and Services AS4	202207 0990 202208 0990	dia dia dia dia dia dia dia dia dia	Labor OPER Labor OPER	822 820000 Labor 822 820000 Labor	240 Regular Payroll - NJ PA 340 Regular Payroll - NJ PA	3.218.16 2.275.08 4.717.28 3.363.16	650.97 292.11 Ad 962.31 431.81 Ad	train Activities - Common 001 train Activities - Common 001	
TICE SUPPLIES & EXPENSES AN CO.	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202204 09900 202206 09900	Purchase Invices LS Micc. Environe Recording     Purchase Invices LS NEOLE RUMPEL-4EACON HEL SUBITS	Ensitive Exa E 10/7502 OPER Ensitive Exa 8529/39-CC OPER	022 821000 Non-Labor 022 821000 Non-Labor	235 Employee Misc Expenses AP 215 Employee Business Masis AP	250. 170.38 779.35 559.60	50.57 22.69 Ac 157.65 70.74 Ac	nin Activities-Common 001 Imin Activities-Common 014	68114 Manakin, Kalv Edwar, Nor OK 6445 CORP CREDIT CARE Nor OK 68114 Manakin, Kalv Edwar, Nor OK 68114 Manakin, Kalv Edwar, Nor OK
FICE SUPPLIES & EXPENSES AA CD FICE SUPPLIES & EXPENSES AA CD	AG4 - Products and Services AG8 AG4 - Products and Services AF4	202207 0990	10 Purchase Invoices LS Milleon, Bankers Meeting 10 Purchase Invoices LS Milelis, Englisher Team Meeting	Ensitive Exa E 1222201 OPER Ensitive Exa E 1222201 / ACCO	022 821000 Nan-Labor 022 821000 Nan-Labor	210 Employee Auto Misage AP 215 Employee Business Masin AD	27.5 26.5 61.65	7.59 3.4 Ad	nin Activities-Common 001	68154 Mezalsky Kally Edwar Not CF 68154 Mezalsky Kally Edwar Not CF
IC CUST AC EX AA CD	A54 - Products and Services A54	202206 0990	15 Labor Cost USD Jahor Visit USD	Labor OPER	0022 905000 Labor	343 Regular Payrol - NJ PA 343 Regular Payrol - NJ PA	43./2 712.14 371.45	243.99 96.7 Ki	John Mover 001	labor
MINA CENSALARES AA GD	Add - Products and Services. Add Add - Products and Services. Add	202112 0990 202112 0990	ma unano constanti NG Labor Cont USD	Labor DP5H Labor OP5R	221 82000 Labor 221 82000 Labor	340 Recular Partol - NJ PA 340 Recular Partol - NJ PA	-382.82 217.64	-298.2 -119.62 Vo 218.64 99. Vo	Juntary RNG Program 001	labor labor
THE SUPPLES A EXPENSES AA CD THE SUPPLES A EXPENSES AA CD THE SUPPLES A EXPENSES AA CD	Ad- Products and Services. Add Add - Products and Services. Add	202205 0990	107 Labor Cost USD	Later OPER	127900 Labor 2022 821900 Labor	232 Generation Mark, Generation, J., 49 203 Generation Markan, 49 203 Generation Markan, 49 203 Generation Markan, 49 2043 Regular Payell - 142, 59 2048 Regular Payell - 142, 59 2048 Regular Payell - 142, 59 2048 Regular Payell - 142, 59 2049 Reg	71.26 49.88	54.41 6.42 Te	Ann Automatic Common Common India Marun Common Con Automa PRIA Processin Suntary PRIA Processin Suntary SPRIA Processin Suntary SPRIA Processin Suntary SPRIA Processin Suntary SPRIA Processin Suntary Services Common Suntary Services Common Suntary Services Common Suntary Services Common Services Common Statistic Com Instruments (Statistica) Com Instruments (Statistica) Com	labor labor
PLOYSE PENSIONS & BENEFITS N AA CD	Ad- Products and Services. ASA ASA - Products and Services. ASA	202209 0990	111 Purchase Invoices LS Maak. Chicote via Doordaah	Enginee Sag E1265201 OPER	2022 201102 Non-Labor	215 Employee Rusiness Meals AP	71.20 50.38 20.59 21.03	6.19 2.77 A	and G Common Training 001	112591 Barrington, Andrew Th. Not CA 104514 Fulton, Ty J. Not CA
HEALSONPLIES & EXPENSES AN CD MINA GENISALARES AN CD	AS4 - Products and Services. AS4 AS4 - Products and Services. AS4	202208 0990 202112 0990	112 Hachase moles LS Dee, M Group Membership Renewal for Troy Inite 60 Labor Cost USD	Voucher (E17456601 OPER Labor OPER	2022         82/9600         Labor           2023         82/9600         Labor           2023         82/9600         Nor-Labor           2024         82/9600         Nor-Labor           2025         82/9600         Labor           2026         82/9600         Labor           2027         82/0000         Labor           2028         82/0000         Labor           2029         82/0000         Labor           2021         82/0000         Labor           2021         82/0000         Labor           2021         82/0000         Labor           2022         82/0000         Labor           2024         82/0000         Labor	ISID LINES AP 340 Regular Paytoli - NJ PA	230 162.6 805.65 503.54	46.52 20.68 R 166.73 74.98 C	a Mant Admin Activity 001	196514 Fulton, Ty J Not CA labor
MINA GENSALARES AA CD MINA GENSALARES AA CD	A54 - Products and Services. A54 A54 - Products and Services. A54	202201 09900 202203 09900	660 Labor Cost USD 660 Labor Cost USD	Labor OPER Labor OPER	022 82000 Labor 022 82000 Labor	340 Repular Payroli - NJ PA 340 Regular Payroli - NJ PA	500.01 417.67 700.79 499.60	119.51 53.63 Ct 142.97 64.16 Ct	noany Utility Initiatives 001 Impany Utility Initiatives 001	abor abor
MINA GENSALARES AA CD	AG4 - Products and Services. AG4 AG4 - Products and Genuices. AG4	202205 0990	60 Labor Cost USD Labor Cost USD	Labor OPER	2022 820000 Labor 821 820000 Labor	240 Recular Payroll - NJ PA 240 Recular Payroll - NJ PA	988.04 687.08 1.278.69 Per 72	199.46 99.5 Cr 294.94 199.5	many USIN Initiatives 001	labor
MINA GENSALARES AA CD	AS4 - Products and Services AS4 AS4 - Doducts and Services AS4	202201 09900	190 Labor Cost USD		022 \$20000 Labor	340 Regular Payrol - NJ PA 341 Reputer Payrol - NJ PA	2 10 40 40 10 40 50 50 50 50 50 50 50 50 50 50 50 50 50	64.72 29.04 Co	npany Utility Initiatives 001	libor libor
MINE CENSALARES AA CO	Add - Products and Services. Add Add - Products and Services. Add	202206 0990	HE Labor Cost USD	Labor OPER	2022 820000 Labor	240 Recular Parcel - NJ PA 340 Recular Parcel - NJ PA	10,623 7416.23	2122.61 852 Ac	ein Activities-Common 001	abor abor
MINA CENSALARES AA CD	Abd - Products and Services A54 A54 - Products and Services A54	202206 09900 202206 09900	ma Labor Cont USD	Labor OPER Labor OPER	2022 820000 Labor 2022 820000 Labor	240 Panular Panol - NJ PA 240 Recular Panol - NJ PA	7.413.76 5.262.57 5.778.56 4.065.02	1300.00 673.13 Ad 1.168.84 524.5 Ad	min Activities Common 001	labor labor
TICE SUPPLIES & EXPENSES AA CD	Abit - Products and Services Abit Abit - Products and Services Abit	202206 0990	na Lance Lon UEU 62 Purchase Incises LE Medie CCL Leadenthio Training	Ensister Dis E1007502 OPER	82000 Labor 2022 821000 Nan-Labor	ana nagalat Paytot - NJ PA 215 Emoloxee Business Meals AP	4,012.18 2,260.58 130.76 120.71	182235 418.65 Ad 34.55 15.5 Ad	min Activities-Common 001	68154 Mazaluke Kelly Edwar Not Cr
HOL SUPPLIES & EXPENSES AA CD	AS4 - Products and Services. AS4 AS4 - Products and Services. AS4	202207 09900 202111 09900	Hard Hundhass muclose LES Panking, Bankers Meeting P15 Lador Cost USD	Employee Exp (E 1253501 OPER Labor OPER	822 821000 Non-Labor 821 905000 Labor	225 Employee Misc Expenses AP 363 Recular Pavroll - NJ PA	13. 9.19 1.772.39 924.53	2.63 1.18 Ad 605.53 242.33 Ki	Jin Activities-Common 001 Indela Mover 001	68154 Mazalukx Kelly Edwar Not CK
IC CUST AC EX AA CD MINE GEN SALARES AA CO	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202201 0990 202201 0990	Image: Control Image: Contro	Labor OPER Labor OPER	022 80000 Labor 022 820000 Labor	215 Employee Business Masis AP 235 Employee Mills: Expenses AP 340 Result: Panol - NJ PA 340 Result: Panol - NJ PA 340 Result: Panol - NJ PA 340 Result: Panol - NJ PA	1.034.16 560.28	368.01 145.87 Ka -0,180.21 -1,450.45 Ka	xiela Mover 001 Auntary RNG Program 014	abor abor abor
NERAL ADVERTISING EXPENSE AA GD	A54 - Products and Services A54 A54 - Products and Services A54	202112 0990 202112 0990	N2 Purchase Incides LS RNG/WA Bill Insert Jan 2021 N2 Purchase Incides LS RNG/WA Bill Insert Jan 2021	Voucher 25101 OPER Voucher 25101 / NOCD	221 920100 Non-Labor 221 920100 Non-Labor	810 Advertising Expenses AP 810 Advertising Expenses AP	3.116. 200.44	2.144.84 971.16 Vo 180.04 971.16 Vo	untary RNG Program 001	BBBB NATIONAL COLOR G Net CA BBBB NATIONAL COLOR G Net CA
TICE SUPPLIES & EXPENSES AA CO	AG4 - Products and Services. AG4	202112 09901	107 Labor Cost USD	Labor OPER	821600 Labor	810 Advertaing Expenses AP 810 Advertaing Expenses AP 340 Recular Panol - NJ PA	200.44 77.26 46 200.17 44. 20.30 152.60 5524 152.60 5524 162.02 100.00 162.02 100.00 162.02 100.00 162.02 107.16 162.02 107.16 162.	54.75 6.60 Te	econ Services 001	
PLOYSE PENSIONS & BENEFITS N AA CD	Ab4 - Products and Services A54 A54 - Products and Services A54	202209 09900	107 Lubor Cost USD 111 Purchase Involves US Artens Arters to Pleanade Institute Tainino - Derver 111 Purchase Involves US Pating & GEG 111 Purchase Involves US Pating & GEG	Ensiove Lao E1762501 OPER Ensiove Eao E1762501 OPER	2022 Solition Non-Labor 2022 Solition Nan-Labor	zus renălă AP 235 Employee Misc Expenses AP	904 220.17 48 23.50	92.9 42.13 A 9.71 4.26 A	and G Common Training 001	112591 Barrinoton Andrew Th 112591 Barrinoton Andrew Th Not CA
MINA SANSALARES AA CD	AS4 - Products and Services. AS4 AS4 - Products and Services. AS4	202208 0990 202206 0990	mo Labor Cost USD 600 Labor Cost USD	Labor OPER Labor OPER	6022 820000 Labor 1022 820000 Labor	arra Non Benefit Labor - NLI PA 340 Regular Paytoli - NLI PA	175.68 124.2 1,351 865.38	25.54 15.94 W 273.36 122.68 C	Japany Utility Initiatives 001	labor labor
MINA GENSALARIES AA CD MINA GENSALARIES AA CD	AS4 - Products and Services AS4 AS4 - Products and Services AS4	202208 09900 202206 09900	M0 Labor Cost USD Labor Cost USD	Labor OPER Labor OPER	222 \$20000 Labor 222 \$20000 Labor	343 Recular Pavroll - NJ PA 343 Recular Pavroll - NJ PA	1.430.91 1.011.58 1.424.28 1.006.99	289.44 129.89 Cr 289.11 129.29 Cr	noany USBN Initiatives 001 anoany USBN Initiatives 001	labor labor
MINA GENSALARES AA CO	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202208 0990	MA Labor Cost USD	Labor OPER Labor OPER	022 82000 Labor 022 82000 Labor	205 Artine <ul> <li>AP</li> <li>205 Anthone Minc: Expenses</li> <li>AP</li> <li>210 Non Rewells Labor: AU</li> <li>PA</li> <li>300 Non Rewells Labor: AU</li> <li>PA</li> <li>300 Non Rewells Labor: AU</li> <li>PA</li> <li>300 Resolute Pannel: AU</li> <li>PA</li> </ul>	602.58 425.99 24.28 17.16	121.89 54.7 Ci 4.91 2.94 Ci	opany Utility Initiatives 001 angany Utility Initiatives 004	labor labor
TO AND INSTRUCT ADVERTIGIP OR GD	A54 - Products and Services A54	202110 06800 000000	80 Labor Cost USD 90 Labor Cost USD 90 Putchase Inviciona LSI US-Tax- OFFSPCK-OFFSET	Labor OPTER Contractor MAASSA OPTER	021 909000 Labor 022 909000 Labor	343 Regular Payroll - NJ PA 000 Dodessional Servicer **	912.07	913.07 Fe	nace Filter Repic Prop- 001	80812 QUESTLINE NC Not CA
MINA GENSALARIES AA CO	AG4 AG4 Products and Services. AG4	202111 0990	102 Labor Cost USD	Labor OPER	221 82000 Labor	340 Regular Partol - NJ PA	8900.54 6230.2	0. Fs 1.841.97 828.37 Ad	min Activities Common 001	adeal adeal Links MC Not CA
MINE GENERALARIES AA CD	Ab4 - Products and Services A54 A54 - Products and Services A54	202209 0990	na Labor Gen UED 102 Labor Cost UED	Labor OPER Labor OPER	82000 Labor 8222 82000 Labor	ano negalati Paytot - NJ PA 340 Recular Paytoti - NJ PA	1,081.36 257.07 1.585.62 1.120.65	222383 100.65 Ad 220.74 143.93 Ad	min Activities-Common 001	labor labor
MINA GENSALARIES AA CD MINA GENSALARIES AA CD	AG4 - Products and Services AG4 AG4 - Products and Services AC4	202112 09900 202202 neev	HE2 Labor Cost USD HE2 Labor Cost USD	Labor OPER Labor OPER	221 820000 Labor 222 820000 Labor	343 Regular Payroll - NJ PA 343 Regular Payroll - NJ PA	1,085.93 367.13 604.2 A50.05	228.8 102. Ad 134.35 40.1 Ad	rin Activities-Common 001 Imin Activities-Common 014	60812 QUESTURE NC No CA BOO BOO BOO BOO BOO BOO BOO BOO BOO BO
MINA GENSALARES AA CO MINA GENSALARES AA CO	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202204 09900 202206 09900	162 Labor Cost USD Labor Cost USD	Labor OPER Labor OPER	022 820000 Labor 022 820000 Labor	340 Recular Payroll - NJ PA 340 Regular Payroll - NJ PA	2,000.2 1,402.11 1,209.00 004	418.35 187.74 Az 264.96 148.0 Az	nin Activities-Common 001 min Activities-Common 014	abor abor abor
MINA GENERALARES M CD	AG4 - Products and Services AG4	202209 09900	102 Labor Cost USD 102 Labor Cost USD 102 Purchase Inicides LID Islanis, Employee Meeting	Laborato La 6         4.20200         0700           Laborato La 6         4.20200         0700           Laborato La 6         0700         0700           Laborato La 7         0700	222 920000 Labor 2022 920000 Labor	000 Professional Services AP 500 Resolute Provid - NJ PA 300 Reguite Payod - NJ PA		184.07         (38.32)         A           22230         19665         A           2231         19665         A           2324         1967         A           2325         1967         A           19455         B         A           40355         B         A           40355         B         A           41646         2011         A           45170         2503         A           46164         2011         A           45170         2503         A           45141         4617         A           45123         4734         A           45141         4617         A           45123         4734         A           45141         4617         A           45122         26433         A           45123         2524         A           45124         2525         A           45135         1974         C           45136         19724         C           45139         19724         C		Aborta Parameter Parameter
IC CUST AC EX	Ab4 - Products and Services A54 A54 - Products and Services A54	202204 09900	na Pronoune related to Imaas, angoge Imagg	Labor OPER	821000 Non-Labor 2022 900000 Labor	a na employee stuaness tikels AP 340 Recular Payroll - NJ PA	211.21 549.31 2.629.44 1.371.51	42.72 19.18 Ad 900.87 257.06 Ki	edela Mover 001	68114 Madalukx Kelly Edwar Not CA
NERAL ADVERTISING EXPENSE AA GD NERAL ADVERTISING EXPENSE AA GD	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202112 0990 202201 0990	Idolaa kucka ta kaaa, Intojo kaa kanog     Idolaa kucka ta kaaa, Intojo kaa kanog     Idolaa kucka ta kaaa, Intojo kaa kanog     Idolaa kucka ta kaaa kanog     Idolaa kucka ta kaaa kanog     Idolaa kucka ta kanog     Idol	Voucher 25101 OPER Voucher 25101 OPER	021 900100 Non-Labor 022 900100 Non-Labor	810 Advertising Expenses AP 810 Advertising Expenses AP	0. -280.44	0. 0. Ve -182.76 -87.68 Ve	untary RNG Program 001 suntary RNG Program 001	8988 NATIONAL COLOR G Not CA 8988 NATIONAL COLOR G Not CA
NERAL ADVERTISING EXPENSES AN CO.	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202201 09900 202111 09900	N2 Purchase Invoices LS RNG Bill Insert K7 Labor Cost USD	Contractor OPER Labor OPER	022 820100 Non-Labor 021 821900 Labor	020 Professional Services PA 3e0 Regular Payroll - NJ PA	-1.911.25 71.26 40.00	-1.212.72 -687.53 Ve 54.75 - 443 Te	Jantary RNG Program 001 Jacon Services 014	Net C#
TICE SUPPLIES A EXPENSES AA CD	A54 - Products and Services A54 A54 - Doub	202201 0990	107 Labor Cost USD	Labor OPER	822 827600 Labor	340 Recular Payroll - NJ PA	71.26 50.38	54.41 6.47 Te	econ Services 001	abor
TICE SUPPLIES & EXPENSION AN CO	AG4 AG4 Products and Services. AG4	202207 0990	107 Labor Cost USD	Labor OPER	2022 821600 Labor	540 Regular Payroll - NJ PA	71.4N 50.38 71.26 50.38	54.41 6.47 Te	econ Services 001	abor abor
MINA GENSALARES AA CO	AG4 - Products and Services AG4 AG4 - Products and Services AG4	202206 0990 202208 0990	It1 Labor Cost USD IS5 Labor Cost USD	Labor OPER Labor OPER	822 820000 Labor 822 820000 Labor	343 Regular Payroll - NJ PA 343 Regular Payroll - NJ PA	-101125 77.20 66.30 77.20 50.30 77.20 50.30 77.20 50.30 3.75.20 50.30 3.75.20 50.30 3.86.6 224.40 1.50.55 66.6 20 1.50.55 1.16.65 1.151.1 1.166.63 2.20.63 1.16.11	643.22 288.64 A	ed G Common Trainine 001 origiace 2022 001	abor abor
	AG4 - Products and Services. AG4 AG4 - Products and Services. AG4	202111 09900 202112 //004/	60 Labor Cost USD 60 Labor Cost USD	Labor OPER Labor OPER	2021 820000 Labor 2021 820000 Labor	340 Recular Pavroli - NJ PA 340 Recular Pavroli - NJ PA	1.303.35 958.52 1.521.5 1,965.00	283.39 127.44 Cr 254.87 141.64 Cr	noany Utility Initiatives 001 anoany Utility Initiatives 014	abor isbor
MINA GENSALARES AA CD MINA GENSALARES AA CO		202204 0990	190 Labor Cost USD	Labor OPER	822 \$20000 Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	2,000.07 1,401.17	418.08 187.62 Co	mpany Utility Initiatives 001	Net CA CA bior bior bior bior bior bior bior bior
MINIA GENSALARES AA CD MINIA GENSALARES AA CD MINIA GENSALARES AA CD O AND MSTRUCT ADJECT EVE	AG4 - Products and Services AG4									
MINI GALANDES A CO MINI GENERANDES A CO MINI GENERANDES A CO MINI GENERALARES A CO O MON DETRUCT AVIERT ENP OR CO O MON DETRUCT AVIERT ENP OR CO	AG4 - Products and Services AG4 AG4 - Products and Services AG4 AG4 - Products and Services AG4 AG4 - Products and Services AG4	202209 0680 202205 0680	90 Labor Cost USD 90 Labor Cost USD 90 Labor Cost USD	Labor OPER Labor OPER	2022 908000 Labor 2022 908000 Labor 2020 908000 Labor	340 Regular Payrol - NJ PA	219.12	218.12 Fe	mace Filter Real: Prop- 001	
MIRE BOILS ALVARES AV. DO MIRE GENERAL ALVARES AV. DO MIRE GENERAL ALVARES AV. DO ALVARES AV. DO ALVARES AV. DO MIRE GENERAL ALVARES AV. DO MIRE GENERAL ALVARES AV. DO	IAG - Productina and Services Add. IAG - Productina and Services Add. IAG - Productina and Services Add. IHI - Corres, Colument & Seguest IHI IHI - Corres, Colument & Seguest IHI			NateNoteNoteNate <td< td=""><td><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></td><td>340 Regular Payrol - NJ PA 240 Resular Payrol - NJ PA 505 Resular Payrol - NJ PA 505 Subscriptions AP</td><td></td><td>298.12 FA 108. 44.87 Ac 108.07 757 Ac 104.07 757 Ac 104.01 0.67 Ta 209.43 13846 La 1,204.52 504.55 La 100.54 81.57 La</td><td>Angung Collig Hasks Proc. Oct. Image Filter Reals Proc. Oct. Image Filter Reals Proc. Oct. Image Filter Reals Proc. Oct. Image Activities Common. Oct. Image Reals Activities Common. Oct. Ima</td><td>No na 1960 1970 1970 1970 1970 1970 1970 1970 197</td></td<>	<table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row><table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row></table-row>	340 Regular Payrol - NJ PA 240 Resular Payrol - NJ PA 505 Resular Payrol - NJ PA 505 Subscriptions AP		298.12 FA 108. 44.87 Ac 108.07 757 Ac 104.07 757 Ac 104.01 0.67 Ta 209.43 13846 La 1,204.52 504.55 La 100.54 81.57 La	Angung Collig Hasks Proc. Oct. Image Filter Reals Proc. Oct. Image Filter Reals Proc. Oct. Image Filter Reals Proc. Oct. Image Activities Common. Oct. Image Reals Activities Common. Oct. Ima	No na 1960 1970 1970 1970 1970 1970 1970 1970 197

92000 ADMINA GENSALARES AA CD 908000 CLISTSVC & NFO EXP-CUST ASST OR GD	H14 - Comm. Outreach & Support H14 202203 09805535 H14 - Comm. Outreach & Support H14 202206 06805153	Labor Cost USD Purchase Invoices US Maale, Dimer while traveling for work to attend OECA	Labor OPER 2022 Emoloyee Exo (#16622501 OPER 2022	\$20000 Labo \$08000 Non-	or 240 Resular Pantol - NJ PA -Labor 215 Employee Business Masis AP	2.036.05 1.439.95 53.05	AC21         URLB is instantantical (III)         Other         Material Isolation (IIII)         Material Isolation (IIIII)         Material Isolation (IIIIII)         Material Isolation (IIIIIII)         Material Isolation (IIIIIIIII)         Material Isolation (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
S2000 ADMIA GENSALARES AA CD S2000 ROMAL GENSALARES AA CD	H14 - Comm. Outwach & Support H14 202207 06600162 H14 - Comm. Outwach & Support H14 202208 0660162	Labor Contrillio Labor Contrillio	Labor CONTROL	\$20000 Labo	or 340 Resular Pantol - NJ PA or 340 Resular Pantol - NJ PA	0.2.25           400.15         341.50           664.2         405.42           12700         1900.77           97.2         61.65           77.26         40.86           77.25         50.36	Bill E         Line Norme Adm. GRI         Oth         BB073         Mattheway, Aras Lawran, Star GAT, A           2023
S2000 ADMINE GENERALISES AN CD S2000 OFFICE SUPPLIES & EXPENSES A CD S2000 OFFICE SUPPLIES & EXPENSES A CD	HH4 - Comin, Cuthach & Succost HH4 20206 0960162 HH4 - Comin, Cuthach & Succost HH4 20206 0960162	Eater cost tricio Purchase insciser LIS Ithanis, Kelv Macalsky (AS4) team coffee	Enginee Eag #16682501 OPER 2022	921000 Labo	AD EXEMPTION HIGHLA PRV PA     AD     A	2705 1306/7 87.2 6105	198.16 245.07 Admin Activities Common 001 10859 Rumoet Note E Not CATA
S21000 OFFICE SUPPLIES & EXPENSES AN CD	H14 - Comm. Outwach & Support H14 202202 09805107 H14 - Comm. Outwach & Support H14 202202 09805107	Labor Cost USD	Labor OPER 2022	921900 Labo	or Set3 Reputer Payroll - NJ PA	71.26 50.38 9.702.57	56.45 6.47 Telecon Services 005 labor 2,272 (2 1) RNA: Gau Cascon 005 labor
92000 ADMINE GENSALARES AA CD 820000 ADMINE GENSALARES AA CD	H14 - Comm. Outwach & Suzont H14 202201 09905535 H14 - Comm. Outwach & Suzont H14 202201 09905555	Labor Cost USD	Labor OPER 2022	920000 Labo	or Set3 Reputer Payrol - NJ PA	901.71 607.46 9.074.6 9.144.60	182.4 81.65 Law Income Admin All 001 Mahor 660.17 902 Low Income Admin All 001 Mahor
92000 ADMINE GENSALARES AA CD 92000 ADMINE GENSALARES AA CD	H14 - Comm. Outwach & Support H14 202112 09905535 H14 - Comm. Outwach & Support H14 202072 09905555	Labor Cost USD Internet Cost USD	Labor OPER 2021	920000 Labo	or 340 Regular Payroll - NJ PA	1,202.28 841.57	248.81 111.9 Low Income Admin All 001 Million
SECON ADMINI GENERALARES AA CO		Joint Control 1 Joint, Chron with Family for any an about DOCA.	Marine fa Catalant         000         000           Marine fa         000         000         000           Marine fa         000 </td <td></td> <td>Bit and Parket Note 100         P           Bit and Parket Num 1         P           Bit and Park Note 100         P           Bit and Park Note 10</td> <td>ABBA         ABBA           ABBA         ABBA</td> <td>430         50</td>		Bit and Parket Note 100         P           Bit and Parket Num 1         P           Bit and Park Note 100         P           Bit and Park Note 10	ABBA         ABBA	430         50
92000 ADMIN GENSALARES AA CD 92000 ADMIN GENSALARES AA CD	H14 - Comm. Outwach & Support H14 202203 09600162 H14 - Comm. Outwach & Support H14 202203 09600162	Labor Cont USD Labor Cont USD Durbase Juncture 16   MDRTHE MEYED/ Onto Drans CCE	Labor OPER 2021 Labor OPER 2022 Muchar 9899476-01 00CD 2022	920000 Labo	or SHO Reputer Partol - NU PA	557.2 300.91 0.93 0.93	11271 50.58 Admin Activities-Common (00) Information (00)
S21000 OFFICE SUPPLIES & EXPENSES AN CD	H14 - Comm. Outwach & Support H14 202203 09905107 H14 - Comm. Outwach & Support H14 202203 09905107	Labor Cost USD (see a cost of the cost of	Labor OPER 2022	921900 Labo	or Seb Repular Payrol - NJ PA	71.26 50.38 71.36 50.38	56.45 6.47 Telecon Services 005 More Marcon Se
921000 OFFICE SUPPLIES & EXPENSES AM CD	H14 - Comm. Outwach & Support H14 202207 09905107	Labor Cost USD	Labor OPER 2022	\$21500 Labo	or 340 Recular Payrol - NJ PA	71.26 50.38	1441 6.47 Telecon Services 001 bbor
92000 ADMILEGENSALARES OR GD	H14 - Comm. Outwach & Support H14 202207 06805229	Labor Cont USD	Labor OPER 2022	920000 Labo	or SHO Regular Paytol - NJ PA	1,527	1,537 LLPAP- Gas Oregon 001 labor
S2000 ADMINI GENSALARES AA CD	H14 - Comm. Outwach & Support H14 202204 09605535	Kan Bandare     Kan Banda	Inflat         OFGR         202           State         OFGR         203           Inflat         OFGR         202           Lab         OFGR         202	920000 Labo	or SHO Require Partol - NU PA	1,527 2,227 1927,67 1,884 1322,56 1,527 1066,65 1,041,27 256,13 27,269	554.6         1.50         DAP- Gar Oragon         00         Monte           554.6         1.50         Sector Sect
S2000 ADMINI CENSALARES AA CD	H14 - Comm. Outwach & Support H14 202207 09905555 H14 - Comm. Outwach & Support H14 202207 09905555	Labor Cost USD Labor Cost USD Durchess Incident IDI Marie Lingth while travelor for any material (CDN)	Labor OPER 2022 Environme Con E 160/2021 (DECE 2022	92000 Labo	or 340 Recular Panol - NJ PA	1.041.27 736.12 07.06	1411         0.1         International         00         Mark           1411         0.1         International         00         Mark           1411         0.0         0.0         Mark         Mark         Mark         Mark           1411         0.0         0.0         Mark         Mark         Mark         Mark         Mark         Mark           1411         0.0         0.0         Mark         Mark </td
SOBOOL CLETTING & NO EXPLOSITION OF CLET	H14 - Come Columnic Agence H14 20206 0660114	Parchase Industry Gall Internet Canada and a state of an and a state of Creation Energy Coordinator's Association meeting	Enginee Exil E1622501 OPER 2222	600000 Nor-	Stator 200 Engines Lotaino AP	421	201 Set South Addition (Set) (Set) Set South Addition (Set)     201 Set South Addition (Set) (Set)     201 Set South Addition
S2000 ADMINE GENERALARES AA CO	H14 - Come Outwork & Support H14 20206 0990162	Destination for the RECEIPT AND A DESTING THE DATE OF A DESTINGTION OF A DESTINATION OF A DESTINATIONO OF A DESTINATIONO OF A DESTINATIONO OF	Environme Env. 8529439-CC OPER 2222	820000 Non-	Nation 200 Employee Lodging AP	401 4 240 248.10 776.18 71 50.38 71 46.68	2021 2222 Amin Articles Journey 001 2445 (1000 COCHT CAD) NO CATA
92100 OFFICE SUPPLIES & EXPENSION AND CO	H14 - Comm. Outwach & Support H14 202112 09805107	Labor Constato	Environa.Com/S20128-CC         DEFER         2022           Labor         CPER         2021	921900 Labo	or SH3 Regular Partol - NJ PA		Stati         Statistics         Statistististics         Statis
S2000 ADMINE GENERALARES CR GD	H14 - Comm Outwach & Succost H14 20206 0660229 H14 - Comm Outwach & Succost H14 202110 09905555	Labor Cost USD	Lator OPER 2002	820000 Labo	or 340 Hadular Pavidi - NJ PA or 340 Recular Pavidi - NJ PA	7.442.45 5214.47	2.102 LEXA-Gas Creace 001     100
D00000         Addesis         Display         Addesis         Display           000000         CLIT SVCL & NPC SHOCK FORT         OC         OC           000000         Addesis         Schröhlundess         AA         CO	H14 - Comm. Outwach & Support H14 202206 06865150 H14 - Comm. Outwach & Support H14 202110 06600162	Devotement Interfaces IVE Island, Gais for car rental while traveling for work to attend OSICA Labor Cost USD	Later         D65R         2011           Corvisano Cr         £1802201         055R         2021           Later         656R         2021         055R         2021           Later         055R         2021         2021           Later         055R         2021         2021           Later         055R         2022         2021           Later         055R         2022         2021           Later         055R         2022         2021           Later         055R         2022         2021	908000 Non- 920000 Labo	<ul> <li>Labor 205 Employee Misc Expenses AP or 340 Recular Payrol - NJ PA</li> </ul>	43.5 121 574.95 430.00 71 50.30 71 50.30	Cetter //         Design Composition         Design Composition <thdesign composition<="" th="">         Design Compositio</thdesign>
S2000 ADMINE GENERALISE AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Support H14 202201 09605102 H14 - Comm. Outwach & Support H14 202208 09605107	Labor Cost USD	Later UPER 2022 Later OPER 2022	921600 Labo	or 340 Haguar Paylor - NU PA or 340 Recular Paylor - NU PA	408.08 208.7 71 50.38	BED1 29/17 Administration - Common Oct Boo 54.41 6 Telecom Services 001 Mbor
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Support H14 202208 09865107 H14 - Comm. Outwach & Support H14 202208 09865107	Labor Cost USD Labor Cost USD	Labor OPER 2022 Labor OPER 2022	921900 Labo 921900 Labo	or 340 Recular Payroll - NJ PA or 340 Recular Payroll - NJ PA	71         26.30           80         20.00           100         20.00           100         20.00           402         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           401         24.67           402         24.67           403         40.00           71         46.88           72         46.88           73         46.88	1441     6 Telecon Services     00     1441     6 Telecon Services     00     144     16 Telecon Services     00     14     10     10     1     10     1      1
920100 EMPLOYEE PENSIONS & BENEFITS N AA CD 920000 ACMINIA GENISALARIES AA CD	H14 - Comm. Outwach & Support H14 202205 09902811 H14 - Comm. Outwach & Support H14 202208 09905535	Purchase Invoices LS (KRSTNE MEVER-EVENT MEETING SOLUTIO Labor Cont USD	Voucher 9379439-CC OPER 2022 Labor OPER 2022	926102 Non- 920000 Labo	s-Labor 950 Trainino AP kor 340 Regular Paytoli - NU PA	800 565.56 1,636.29 1156.77	1441         4. Telecon Sankces         001         Mon           14142         721         A and G Common Training Oot         6445         DORP CREDIT CARC NOT AND ADD ADD ADD ADD ADD ADD ADD ADD ADD
900000 CLIST SVC & NFO EXP-CLIST ASST OR GD 920000 ADMIN & GEN SALARIES AA CD	H14 - Comm. Outwach & Support H14 202206 06805153 H14 - Comm. Outwach & Support H14 202112 09900162	Punchase Invoices LSI. Parkina, Parkina POV at SIA while traveling for work to attend OECA Labor Cost USO	Employee Exp E18822501 OPER 2022 Labor OPER 2021	908000 Non- 920000 Labo	skabor 235 Employee Misc Expenses AP or 340 Reputer Payrol - NJ PA	36 432 344.97	2023/W         168.20 Low Ecologi Admini Ad         001         Mathematic Amazoni           36         Low Ecologi Admini Add         001         Mathematic Amazoni           191.59         46         Antini Activities -Commoni Otti         Mathematic Amazoni           292.7         40131         Mathematic Amazoni         Mathematic Amazoni
S20000 ADMINE GEN SALARES AA CD     S21000 OFFICE SUPPLIES & EXPENSES AA CD	H14 - Comm. Outwach & Support H14 202208 0960162 H14 - Comm. Outwach & Support H14 202203 0960162	Labor Cost USD Purchase Invoices LS   KRISTNE MEYER-20 CMUS 880-799-9688	Labor OPER 2002 Voucher 9105439-CC OPER 2002	820000 Labo 921000 Non-	or Deb Reputer Payroll - NJ PA Habor SHS Telecommunication Use AP	485.81 540.82 114 80.86	22.11 10 Admin Activities Common 001 6445 CORP CREDIT CARS Not CAT A
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Support H16 202110 09905107 H14 - Comm. Outwach & Support H16 202111 09905107	Labor Cost USD Labor Cost USD	Labor OPER 2021 Labor OPER 2021	921900 Labo 921900 Labo	or 340 Regular Paytol - NJ PA or 340 Regular Paytol - NJ PA	71 49.88 71 49.88	54.75 7 Telecon Senices 001 Mbor 54.75 7 Telecon Senices 001 Mbor
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Support H14 202202 09905107 H14 - Comm. Outwach & Support H14 202206 09905107	Labor Cost USD Labor Cost USD	Labor OPER 2022 Labor OPER 2022	921900 Labo 921900 Labo	or SHD Repular Payroll - NU PA or SHD Repular Payroll - NU PA	71 50.38 71.26 50.38	56.41 6 Telecon Senices 001 Ibbar 56.41 6.47 Telecon Senices 001 Ibbar
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Suzzort H14 202111 09965107 H14 - Comm. Outwach & Support H14 202205 09965107	Labor Cost USD Labor Cost USD	Labor OPER 2021 Labor OPER 2022	821900 Labo 921900 Labo	or 240 Require Payrol - NJ PA or 240 Regular Payrol - NJ PA	71 49.00 71 50.30	5475 7 Telecon Senices 001 bbor 5441 6 Telecon Senices 001 bbor
921000 OFFICE SUPPLIES & EXPENSES AA CD 920000 ADMINA GENISALARIES OR GD	H14 - Comm. Outreach & Support H14 202208 09805107 H14 - Comm. Outreach & Support H14 202208 08805229	Later Cent USD Later Cent USD	Labor OPER 2022 Labor OPER 2022	921900 Labo 920000 Labo	or 340 Recular Pantoli - NJ PA or 340 Recular Pantoli - NJ PA	71 50.38 2.032.96	16.41 6 Telecon Senices 001 bibor 2.002.98 LIBNP- Gas Creace 001 bibor
92000 ADMINA GENSALARES AA CD 930200 MSC GENERAL EXPENSE AA CD	H14 - Comm. Outwach & Support H14 202202 09805535 H14 - Comm. Outwach & Support H14 202208 09805535	Lator Cost USD Purchase Invoices US Down 2022	Labor OPER 2022 Voucher 1302 OPER 2022	920000 Labo 920200 Nor-	ez 340 Recular Panoli - NJ PA -Labor 830 Dues AP	41         0.06           62         303           7         303           7         600           80         303           7         600           80         600           80         600           80         600           7         600           7         600           7         600           7         600           7         600           7         600           7         600           7         600           8         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600           9         600	Image: 1         Image: 2
90800 CLIST SVC & NFO EXP-CLIST AGST OR GD 90800 CLIST SVC & NFO EXP-CLIST AGST OR GD	H14 - Comm. Outreach & Support H14 202206 06805153 H14 - Comm. Outreach & Support H14 202209 06805230	Hardnase modese LE (Car Rental Antial while towing for work to attend CECA Parchase invoices LE (HRSTNE MCHER-ALARKA AR 027200193919	Enclose Exc #1602501 OPER 2022 Enclose Exc 989439-CC OPER 2022	909000 Non- 909040 Non-	scapor 220 Employee Car Rantal AP scabor 205 Aldare AP	136.47 237	136.47 Low Income Admin OR 001 88019 Matthews, Ana Lonena Nat CAT A 207 Emerge Attrability Act De 001 6445 DORP OREDIT CARE Nat CAT A
92000 ADMINE GENERALARIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CO	H14 - Comm. Outreach & Support H14 202206 09600162 H14 - Comm. Outreach & Support H14 202206 n66601420	Labor Cost USD Destinana Incrimen 110   KERETINE MEYER-2004/US 888-709-8688	Labor OPER 2022 Voucher 9529439-CC OPER 9999	920000 Labo 921000 Nov	er 340 Recular Panoli - NJ PA -Labor 945 Telecommunication Like AP	628 444.04 0.15 5.76	127.65 57.01 Admin Activities-Common 001 bitor 1.65 0.74 Admin Activities-Common 001 6465 CNG0 CRCHT CLEP Ket ATA 2072 9.3 Admin Activities-Common 001 6465 CNG0 CRCHT CLEP Ket ATA
92000 ADMINE GENSALARES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outwach & Support H14 202209 09800162 H14 - Comm. Outwach & Support H14 202201 09805107	Parchase Inciden LIS INRETINE MEYER-TLF NELLS FLOWERS Labor Cost USD	Emaisvee Eau 9889439-CC OPER 2022 Labor OPER 2022	\$20000 Non- \$21500 Labo	-Labor 235 Employee Misc Excenses AP or 340 Regular Paynol - NU PA	4.15     4.15     4.15     102.46     72.40     71     50     71     50     71     50	20.72 9.3 Admin Activities-Common 001 6445 CORP CREDIT CARE Not CAT A 14 6 Telecon Senices 001 bibor
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA CD	H14 - Comm. Outreach & Susport H14 202209 09865107 H14 - Comm. Outreach & Susport H14 202203 09865107	Later Cost USD Later Cost USD	Labor OPER 2022 Labor OPER 2022	921900 Labo 921900 Labo	or 340 Recular Panoli - NJ PA or 340 Recular Panoli - NJ PA	71 50 71 50.38	14 6 Telecon Senices 001 Mbor 14.41 6.47 Telecon Senices 001 Mbor
20000 ACMINA GENSALARES AA CD 20000 ACMINA GENSALARES AA CO	H14 - Comm. Outwach & Suzzot H14 202111 09805535 H14 - Comm. Outwach & Suzzot H14 202209 Assertation	Later Cont USD Later Cont USD	Labor OPER 2021 Labor OPER 9000	\$20000 Labo \$20000 Labo	or 340 Recular Panol - NJ PA or 340 Recular Panol - NJ PA	4.555 3.188.46 2.947.05 2.083.42	942.68 423.94 Low Income Admin Al 001 Makor 594.13 247.5 Low Income Admin Al 001 Makor
20000 ADMINE GEN SALARES AA CD 20000 ADMINE GEN SALARES AA	H14 - Comm. Outwach & Support H14 202111 09805535 H14 - Comm. Outwach & Support H14 000000 Accesses	Later CentuSD Later CentuSD	Labor OPER 2021	\$20000 Labo	or 340 Regular Paytol - NJ PA or 340 Regular Paytol - NJ PA	1,003 1,102.1 1,003 1,102.1	20174 162 Low Income Admin Al 001 Million 20284 1683 Low Income Admin Al 001 Million
ADMINE GENSALARES AA CD	H14 - Comm. Outwach & Support H14 202205 09905555 H14 - Comm. Outwach & Support H14 900000	Later ContUSD Later ContUSD	Labor OPER 2022 Labor OEEP 2023	\$20000 Labo \$20000 Labo	or 340 Recular Panol - NJ PA or 340 Recular Panol - NJ PA	2.073.65 1.466.11 2.073.65 1.466.11	418.5 188.24 Low Income Admin Al 001 Million 418.5 188.24 Low Income Admin Al 001 Nov
92000 ADMINA GENSALARES AA CD 92000 ADMINA GENSALARES AA CO	H14 - Comm. Outreach & Support H14 202209 0990140 H14 - Comm. Outreach & Support H14 202209 0990140	Labor Cont USD	Labor OPER 2022 Labor OPER 2022	\$20000 Labo \$20000 Labo	or 340 Recular Pantal - NU PA or 340 Recular Pantal - NU PA	924 660.36 664 875	198.94 54.79 Admin Activities-Common 001 bibor 100 58 Admin Activities-Common 001 bibor
921000 OFFICE SUPPLIES & EXPENSIES AA CD 921000 OFFICE SUPPLIES & EXPENSIES AA 700	H14 - Comm. Outreach & Support H14 202209 09905107 H14 - Comm. Outreach & Support H14 000140	Labor Cont USD	Labor OPER 2022 Labor OPER 2022		or 343 Recular Pantel - NJ PA or 340 Recular Pantel - NJ PA	327         444.0           363         444.0           374         2.6           371         2.6           371         2.6           372         3.6           374         2.6           374         2.6           374         2.6           374         2.6           374         3.6           374         3.6           375         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           376         3.6           377         3.6           378         3.6           379         3.6           370         3.6	Image: Section of the sectio
S21000 OFFICE SUPPLIES & EXPENSES AA CD S20000 ACMINA GENSALABLES AG	H14 - Comm, Outreach & Support H14 202201 09805107 H14 - Comm, Outreach & Support H14 902201 09805107	Labor Cont USD Labor Cont USD	Labor OPER 2021	921900 Labo 920000 Labo	or 340 Recular Partol - NJ PA		56.41 6.47 Telecon Services 001 Babor 51.68.07 LBAP- Gas Crean 001 Babor
20000 ADMILE GINSALARES OR GD	H14 - Comm. Outmach & Support H14 202208 06802299 H14 - Comm. Outmach & Support H14 202208 06805229 H14 - Comm. Outmach & Support H14 202208	Labor Cont USD	Labor OPER 2022	820000 Labo	and remove remove - NU PR     and Segular Paytol - NU PR     vr     Seb Regular Paytol - NU PA     vr		1/19/19/19/19/19/19/19/19/19/19/19/19/19
ADMINE GENERALANDES AA CD SCIEDO ADMINE GENERALANDES AA CD	H14 - Comm. Currench & Suzzort H14 202112 09805555 H14 - Comm. Outreach & Suzzort H14 20203 09805555 H14 - Comm. Outreach & Suzzort H14 20203	Labor Contrologi	Later OPER 2021 Later OPER 2022	#20000 Labo	na 240 Hebuar Hanse - NJ PA na 240 Resular Pansel - NJ PA	1,72,39 4,000,56 2,265,32 2,800,52 2,2001,4 2,405,56 1,480,15 1,965 1,280,95 0 0,0 5,500 2,2868,57	1/17/38         (J/M)         <
ISCEND ADMINEGENSALARES AA CD SCEND ADMINEGENSALARES AA CD	H14 - Comm. Outwach & Suzoot H19 202110 09805555 H14 - Comm. Outwach & Suzoot H19 202000 09805555	Later Controls	Labor OPER 2021 Labor OPER 2022 Contention MultiPl	\$20000 Labo \$20000 Labo	or 340 Recular Partoll - NJ PA or 340 Recular Partoll - NJ PA	2.404.56 1.683.15 1.965 1.389.95	
90800 NFO AND INSTRUCT ADVERTISHP AN CD 908000 NFO AND INSTRUCT ADVERTISHP AN CD		Petroaee Invoicee Ltd. (um-tai-te-SPOK-OFFSET-OFFSET Petroaee Invoicee Ltd. (Avida Worker Handout Ublin Safety for Harbarnal Dalling	Lonexcur INVS57 OPER 2022 Voucher 000064 OPER 2021	909000 Nbn- 909000 Nbn-	-Labor 0/0 Professional Services AP -Labor 810 Advertising Expenses AP	0 0. 5.500 2.668.97	u. u. dommon-Company Comi (01 8219 CULVER COMPANY CAT 9 1879.08 751.95 Common-Company Comi (01 8219 CULVER COMPANY CAT 9
	202 - Public Salety 202 202206 06800330 202 - Public Salety 202 202205 06800330		Voucher 2581 OPER 2022 Voucher 60629 OPER 2022	909000 Non- 909000 Non-	Labor 810 Advertising Expenses AP Labor 885 Miscelaneous AP	5.000 2.066.07 9.000 1.455 4.600 1.72.5 3.060 3.060 3.060 3.060 3.060 3.075 3.045 3.0575 3.045 3.0575 3.045 3.0575 3.045 3.0575 3.045 3.0575 3.045 3.05755 3.05755 3.05755 3.05755 3.05755 3.05755 3.05755 3.057555 3.057555 3.057555 3.0575555 3.05755555555555555555555555555555555555	101         10
90800 NFO AND INSTRUCT ADVERT SKP OR GD 90800 NFO AND INSTRUCT ADVERT SKP OR GD	202 Public Salway 202 202205 06800330 202 Public Salway 202 202205 06800330	(Hardhaea Invoicee US) (2022 DR Coordinated Resconce Exercise & Excavator Ploelee Safety Procesms Punchaea Invoicee US) (2022 DR 8111 Safety Digital Madia - Madia Online Google	Voucher 29096 OPER 2022 Voucher 29321 OPER 2022	909000 Non- 909000 Non-	-Labor 810 Advertising Expenses AP -Labor 810 Advertising Expenses AP	16.588	16.587.65 Or - Company Communic 001 80864 PHRADEBILINSONS CAT B 852.14 Or - Company Communic 001 2015 HANNA & ASSOCIATE CAT B
90800 INFO AND INSTRUCT ADVERT EXP. OR GD 90800 INFO AND INSTRUCT ADVERT EXP. OR GD	J02 - Public Saletry J02 20206 0680030 J02 - Public Saletry J02 20208 0680030	Miccelaneous Transac 30% Excavator Malino Returns - Si 125-POSTAG Punchase Invoices USI 2022 - SPUT COST - OR: Tax of the Trade (Contractor Emails)	Voucher 00673 0PER 2022 Voucher 606673 0PER 2022	909000 Non- 909000 Non-	Habor 910 Postade PA Habor 810 Advertising Expenses AP	27 4447	25.05 Or - Company Communic 001 0219 CULIVER COMPANY ORT B 4.467 Or - Company Communic 001 0219 CULIVER COMPANY ORT B
908000 INFO AND INSTRUCT ADVERTIENP OR GD 929100 EMPLOYEE PENSIONS & BENEFITS N AA CD	J02 - Public Sallery J02 202111 06800300 J02 - Public Sallery J02 20208 09902811	Divertises involves 115 OR public officials brochure update Purchase involves LIS Misc. EP - Pictures 2	Voucher 2822 OPER 2021 Emoloyee Exp (E17270501 OPER 2022	\$05000 Non- \$2000 Non-	-Labor 810 Advertising Expenses AP -Labor 235 Employee Misc Expenses AP	172.5	9 4 A and G Common Training 001 112195 Simpson Salina CATB
921000 OFFICE SUPPLIES & EXPENSES AA CD 908000 INFO AND INSTRUCT ADVERT EXP. AA CD	302 - Public Salery 302 202110 09902020 302 - Public Salery 302 20202 0990030	Purchase Invices LS BAREARARIOS PLENTE-MEN MATP LS 2003RINPO AM Purchase Invices LS JENEER PEARSON-MEDIAMED LS reliefUNIS	Voucher 8540139-CC OPER 2021 Voucher 9031139-CC OPER 2022	921208 Non- 909000 Non-	Habor 880 Office Supplies AP	42 20 30.09 27.36 234 178.4 2.07.75	Mail 30         Comment (strams, 0)         Processing         P
92000 ADMINA GENSALARIES OR GD 90000 NEO AND INSTRUCT ADVERT ENP. OR GD	202 - Public Salem 202 202020 06800320 02 - Dublic Salem 102 202020 06800320	Labor Cost USD Durchase Inscises 16 (202) - OD Safety Brothcare WillSMi, Marcanten sample	Labor OPER 2022 Vischer 2509 OEE 0000	920000 Labo	or 340 Recular Panoli - NJ PA	2.307.75	238775 Or - Company Communic Otto Billion Matthews COLORG CATE
90600 INFO AND INSTRUCT ADVERTISIP OR GD 921000 OED/15 SLEEN ISS & EVECTORS 5 AN	302 - Public Sallery 302 202207 06800320 102 - Public Sallery 102 202207 06800320	Micelaneous Transic S2109 RCCH inv M00659990201109-RCCH Later Cent USD	Voucher OPER 2022	909000 Non-	Habor 915 Printing PA	52.78 71 50.38	5278 Or - Conserv Communic 001 OAT B
921000 OFFICE SUPPLIES & EXPENSES AA CD	202 - Public Sulliny 202 202202 06605107	Labor Cost USD	Labor OPER 2022	921900 Labo	or 240 Recular Payrol - NJ PA	(2.76)         50.30           77.16         50.30           77.8         50.30           945.6         50.70           0         0           20         18.8           52.70         1.710           266.2         153.80           466         220.0	Line         Line <thline< th="">         Line         Line         <thl< td=""></thl<></thline<>
921000 OFFICE SUPPLIES & EXPENSES AM CD	200 F Valle, Saletty 200 20206 09902920 200 F Public Saletty 200 20206 09902920	Development from the Control of Content on the Activity of the Content on the 19-19 Development from the Content of Content on the 19-19	Environment of E1600501 OPER 2002	921208 Non-	Habor 200 Employee Lodzing AP	845.85 597.97	M.M.         A.P./I Transmissionamia         Direction         Direction <thdirection< th=""></thdirection<>
921000 OFFICE SUPPLIES & EXPENSES AA CD	J02 - Public Safety J02 202110 09602920	Purchase Incident LE [BARDARARIOS-PUENTE-ABAZON COM/202L07/22 AdDN	Voucher 8540139-CC OPER 2021	921208 Non-	stabor 890 Office Supples AP	20 188	5.65 2.63 Gan Salestyleadth Admin-( 001 6445 CORP CREDIT CARE CAT B
90800 INFO AND INSTRUCT ADVERTISIP AA CD 90800 INFO AND INSTRUCT ADVERTISIP AA CD	Juc - Hube Sales Juc - 200111 0660000 Juc - Public Sales Juc - 200111 0660000	Parchase Incident (D) (U) bit interf. all three cases. Parchase Incident (D) (D) Tar - USPOK (ALDS	Voucher Mittle DHeR 2021 Voucher 74318 OPER 2021	909000 Non-	Habor Brit Advertising Expenses AP	32/8 5.78 295.02 153.89	100 Hell Common-Company Common
90800 INFO AND INCIDENT LAP AN CD 90800 INFO AND INSTRUCT ADVERTIS/P AN CD	J02 - Public Salerin J02 202112 (Medical J02 - Public Salerin J02 202202 (Medical	Purchase Invices LE LENFER PEARSON-MENIMITP LIS EF28P113	Voucher 80284 0PSR 2021 Voucher 8021438-CC 0PSR 2022	909000 Non-	-Labor BIS Micelaneous AP	406.6 213.13	1989 EB Frances Contract Control (201 E219 COLORI CONTROL ON E 198.99 SS-48 Common-Company Comr (201 6445 CORP CREDIT CARE CATE
SCEDUL ADMINE GENERALAHES OR GD 908000 INFO AND INSTRUCT ADVERTISNP OR GD	302 - Male Salley 302 - 202110 0680030 302 - Public Salley 302 - 202205 0680030	Purchase Invoices LIS 2022 OR Exceeder Malino	Labor UP4R 2021 Voucher 8506 OP5R 2022	909000 Non-	Ar SHO Haguar Paytor - NU PA Habor 810 Advertising Expenses AP	2021	101         0-7-5 mm2 Chminal, (b)         011         mxX134404028         Nor           81         8.0         8.0         8.0         8.0         8.0         7.0
SCRIDD EMPLOYEE PENSIONS & RENEFITS N AA CD	202 - Public Salery 202 202208 09602111 202 - Public Salery 202 202208 09602111	Pucchase Incode Lis Mills, air - Hickard Durchase Incodes 16 Millionait, DP - Wite for persentor project 2	Voucher 617270501 OPER 2022	\$2000 Non-	Habor 205 Employee Mills Excentees AP	809 40.02 28.29 20.7 14.60 775 647.67 274.7 -647.67 271.4 141.56 6, 0, 16000 5218.3	MBEL         On-Construction Continues         DBI         INST 1000000000000000000000000000000000000
S21000 OFFICE SUPPLIES & EXPENSIES AA CD S21000 OFFICE SUPPLIES & EXPENSIES AA CD		Puntase Insides LB: Addres, Fiddt to LPSA Convertion Puntase Insides LB: Addres, Fight to LPSA Convertion	Ensiove Eau E 1969601 OPER 2022 Ensiove Eau E 1969601 OPER 2022	921208 Non- 921208 Non-	-Labor 205 Alfane AP -Labor 205 Alfane AP	-775 547.67 -774.7 -547.67	156.71 70.32 Gas Sales/Halth Atmin-C 001 112165 Simpson, Salesa CAT B -156.71 -70.32 Gas Sales/Halth Atmin-C 001 112165 Simpson, Salesa CAT B
90800 INFO AND INSTRUCT ADVERTIDIP AN CD 90800 INFO AND INSTRUCT ADVERTIDIP AN CD	202 - Public Salery 202 202208 09980300 202 - Public Salery 202 202111 09980300	Purchase Involve LS CROSS BORE SAFETY INFLING POSTAGE Purchase Involve LS LIS-Tax - OFFSPOK-OFFSET-OFFSET	Voucher 87225-P OPER 2022 Voucher 74318 OPER 2021	909000 Non- 909000 Non-	Habor 910 Postace AP Habor 810 Advertising Expenses AP	271.4 541.56 0. 0.	92.98 38.86 Common-Company Comr 001 8011 WIRLTS MALING SER CAT 9 0. 0. Common-Company Comr 001 8988 NATIONAL COLOR G CAT 9
90800 INFO AND INSTRUCT ADVERTISHP AA CD 92000 ADMINA GENSALARES OR GD	J02 - Public Saletry J02 202112 09600300 J02 - Public Saletry J02 202111 06600300	Development inversioner HS Bookielas, School maileme Labor Cont USD	Contractor 600365 OPER 2021 Labor OPER 2021	909000 Non- 920000 Labo	Habor 000 Professional Services AP or 340 Reputar Partol - NU PA	10000 52163 1212.6	2416.5 1387.2 Common/Instrume Communic (001 8219 CULVER COMPANY CAT B 1212.6 Or - Company Communic (001 More
92000 ADMINA GENSALARES OR GD 92000 ADMINA GENSALARES OR GD	202 - Public Sallery 202 202204 06800300 202 - Public Sallery 202 202 06 06800300	Labor Cost USD Labor Cost USD	Labor OPER 2022 Labor OPER 2022	920000 Labo 920000 Labo	or 340 Regular Paytol - NJ PA or 340 Regular Paytol - NJ PA	3,715 2,540.4	2,715 (Dr - Company Communic (001 Mbor 2,140.4 (Dr - Company Communic (001 Mbor
90800 INFO AND INSTRUCT ADVERTIDIP OR GD 90800 INFO AND INSTRUCT ADVERTIDIP OR GD	202 - Public Salery 202 202203 06800300 202 - Public Salery 202 202205 06800300	Purchase Involves LIS 2022 PAPA, LI Harrison (Li the Clown) Socialization 811 Austenness Divertises Involves 145 SALES TAX	Voucher 222200 OPER 2022 Voucher 29250 OPER 2022	909000 Non- 909000 Non-	Habor 805 Soonsonships AP Habor 810 Advertising Expenses AP	582 73.72	582 Or - Campany Communic 001 98019 PPELNE ASSOCIATI CAT 9 73.72 Or - Company Communic 001 2015 MANNA & ASSOCIATI CAT 9
00000 NEO AND INSTRUCT ADVERT EXP OR GD 00000 NEO AND INSTRUCT ADVERT EXP OR GD	J02 - Public Saletry J02 202205 06800300 J02 - Public Saletry J02 202208 06800300	Perchane Invities LS 2022 OR Selen Rooker Production Perchane Invities LS 2022 TRANSMISSION ROW INFLING AVETA 2022 LANDSCAPE INFLING FOR OR	Voucher 29058 OPER 2002 Voucher 87235-P OPER 2002	909000 Non-	Habor 610 Advertising Expenses AP Habor 910 Postage AP	224 392	201 Or - Company Communic (001 2015 HHANA & ASSOCIATS CAT B 20151 Or - Company Communic (001 8211 WALTS MALING SER CAT B
88800 INFO AND INSTRUCT ADVERTISIP OR GD 821000 OFFICE SUPPLIES & EXPENSES AA CD	202 - Public Saleny 202 202111 06600300 202 - Public Saleny 202 202206 06602920	Purchase Involves LIS (POSTAGE FOR EMERGENCY RESPONDERS OR AND PUBLIC OFFICIALS OR MALINES Purchase Involves LIS (DEIT CORRECTION	Voucher #1962-P OPER 2021 Emoloyee Exa E 1860601 OPER 2022	909000 Non- 921208 Non-	Habor 919 Postace AP Habor 230 Employee Lodging AP	253. -045.85 -507.97	-171.1 -76.78 Gan Salebulvath Admin-C 001 112105 Simpson Salina CAT B
80000 INFO AND INSTRUCT ADVERTIS/P AA CD 80000 INFO AND INSTRUCT ADVERTIS/P AA CD	202 - Public Saleny 202 202208 06960330 202 - Public Saleny 202 202112 06960330	Durchase Inscise LS US-Tax - USPCH-GHLES Purchase Inscise LS US-Tax - OFFSPCH-OFFSET	Contractor NV257 OPER 2022 Voucher 600364 OPER 2021	909000 Non- 909000 Non-	Habor 000 Professional Services AP Habor 810 Advertising Expenses AP	233 -045.85 -007.97 3.172.5 1.854.78 0 0.	3.4.6.1         0.         Common Common (2000)         000         PEAR ALE SOLDAND COLD         DEE           3.1.2         A. Marking Common Common (2000)         000         DEE         DEE<
92000 ADMINE GENSALARES OR GD 92000 ADMINE GENSALARES OR GD	J02 - Public Salety J02 202112 06800000 J02 - Public Salety J02 202205 06800000	Labor Cost USD Labor Cost USD	Labor OPER 2021 Labor OPER 2022	920000 Labo 920000 Labo	or SH3 Regular Paytol - NJ PA or SH3 Regular Paytol - NJ PA	505.25 2.403.48	505.25 Or - Company Communic (001 labor 2.483.48 Or - Company Communic (001 labor
	302 - Public Safety 302 202203 06800330 302 - Public Safety 302 202205 06800330	Parchase Invoices LB 2022 PAPA Member Dave: OR Dechase Invoices 19, 2022 Market Research of Outwarch Meerials. 1 of 2: OR	Voucher 22228 OPER 2222 Contractor 600631 OPER 2022	909000 Non- 909000 Non-	-Labor \$30 Dues AP -Labor 020 Professional Services AP	30         30           40         40           40         <	1411         0
80800 INFO AND INSTRUCT ADVERTIDAP OR GD 808000 INFO AND INSTRUCT ADVERTIDAP OR GD	302 Public Salery 302 202205 06800330 302 Public Salery 302 202205 06800330	Purchase Invoices LIS (POSTAGE EXCAVATOR INFLING WARD) Purchase Invoices LIS (2022 - M 3 States, WARDOR - Papa Marphylix Promo Pizza Topper - Printing	Voucher 8553-P OPER 2022 Voucher 29250 OPER 2022	909000 Non- 909000 Non-	-Labor 910 Postace AP -Labor 810 Advertising Expenses AP	1.097.67 819.11	1.097.67 Or - Company Communic 001 8011 WALTS MALING SER CAT'S 819.11 Or - Company Communic 001 2015 HANNA & ASSOCIATE CAT'S
80800 NFO AND INSTRUCT ADVERT DVP OR GD 808000 NFO AND INSTRUCT ADVERT DVP OR GD	J02 - Public Salery J02 202209 06800330 J02 - Public Salery J02 202209 06800330	Purchase Invoices LIS 2022 - OR 811 Safety Radio Revision Purchase Invoices LIS 2022 OR 811 Safety Diobal Mada	Voucher 29028 OPER 2022 Voucher 29786 OPER 2022	909000 Non- 909000 Non-	-Labor 810 Advertising Expenses AP -Labor 810 Advertising Expenses AP	520. 4.245.53	520. Or - Company Communic 001 2015 HMMMA & ASSOCIATE CAT B 6.28553 Or - Company Communic 001 2015 HMMMA & ASSOCIATE CAT B
80800 INFO AND INSTRUCT ADVERTIDAP OR GD 808100 EMPLOYEE PENSIONS & BENEFITS N AA CD	302 - Public Sallery 302 202208 06800300 302 - Public Sallery 302 202208 069620311	Destribute Invities (K) 2022 - SPUT COST - OR: PO and ER mailing lists Parchase invoices US listerials EP - Wire for sevenete project	Voucher 600678 OPER 2022 Voucher 617270501 OPER 2022	909000 Non- 926003 Non-	-Labor BBS Miscelaneous AP -Labor BBD Materials & Equipment AP	2.360 14.16 10.01	2.380 Ptr - Common Common 201 8219 CULVER COMPANY CATE 2.89 1.39 A and G Common Training 001 112965 Simpson Salina CATE
60000 NFO AND INSTRUCT ADVERTID/P AA CD 60000 NFO AND INSTRUCT ADVERTID/P AA CO	302 - Public Safety 302 202207 06660330 302 - Public Safety 302 2027** 06660330	Macalaneous Tosnac Fence Solity Malico - Salina Sirol (35-POSTAG Puctane Inolose US) Innico J of 3 for Effectiveness Survey for WAID OR	Voucher OPER 2022 Contractor 00025 OPER 9011	909000 Non-	-Labor 910 Postage PA -Labor 000 Professional Services AP	2.360 36.16 10.01 47 34.79 27.653 14.320.31	2.86 / %- / memory / memory 000     8219 CALKR COMPANY CATE     2.86 139 / And Common Tuning 000     12136 Siminano, Salina     CATE     2.85     3.05 Cammon-Camaan Comit 000     8219     CALKR COMPANY CATE     CATE
20000 ADMINA GENISALARES OR GD	202 - Public Safety 202 202209 06800330 202 - Public Safety Into 0000000	Later Contuitio	Labor OPER 2022	\$20000 Labo	or 340 Repuir Panol - NJ PA or 340 Repuir Panol - NJ Da	3715	2.715.42 Or - Company Communic (001 Million 2.522.12 Or - Communic (001 Million
ADMIN & GENISALARES OR GO INFO AND INSTRUCT ADVERTIDIP OR GO	302 - Public Safety 302 202208 06800320 302 - Public Safety 302 202206 06800320	Labor Cont USD Perchane Inciden US US-Tax - USPCH-GALES	Labor OPER 2022 Voucher 2581 OPER 9999	920000 Labo 909000 New	or 340 Resulter Pantel - NJ PA -Labor 810 Advertising Expenses AP	1979	1.979 Or - Company Communic 001 BBBS NATONAL COLOR GI CAT 9
65500 NFO AND INSTRUCT ADVERTIDAP OR GD	202 - Public Sulley 202 20200 (06800000 202 - Public Sulley 202 202 Analysis	Purchase Invoices LE 2022 OR 811 Safety Radio Revision Purchase Invoices LE 2022 - OR 811 Radio Media	Vaucher 29814 OPER 2022 Vaucher 29318 OPER 9999	909000 Nan- 909000 Nan-	-Labor 810 Advertising Expenses AP -Labor 810 Advertising Expenses AP	1.967.5 4.278	1 NR 5 Or - Company Communic 001 2015 HHMMA & ASSOCIATE CATE 6.229. Or - Company Communic 001 2015 HMMMA & ASSOCIATE CATE
0800 NFO AND INSTRUCT ADVERTIDIP OR GD 08000 NFO AND INSTRUCT ADVERTIDIP OR GD	202 - Public Salimy 202 202209 06800300 202 - Public Salimy 202 202209 06800300	Duschase Invities 145 2022 - OR 811 Safety Diobil Media Perdaae Invities 165 2022 OR 811 Safety TV Revisio	Voucher 29653 OPER 2022 Voucher 29615 OPER 9000	909000 Non-	Labor \$10 Advertaing Expenses AP	6.144.04 1.650	1978 Cr - Contranto Communic B01     1972 Cr - Contranto Communic B01     1974     1974 Cr - Contranto Communic B01     1974     1974 Cr - Contranto Communic B01     1974     1974     197
0000 INFO AND INSTRUCT ADVERTISHP OR GD 21000 OFFICE SUPPLIES & EXPENSIES AA 00	302 Public Salery 302 202110 06800320 302 Public Salery 302 202205 nearce.vtr	Macellaneous Transac 5,1109 RCCH inv M00209856602 109-RBCDH Labor Cont USD	Voucher OPER 2021 Labor OPER 9999	909000 Nbn- 921900 i ehr	s-Labor 915 Printing PA or 340 Resulter Partoll - NJ PA	17.98 71.26 50.38	17.58 Or - Company Communic 001 OKT B 16.41 0.47 Telecom Services 001 bbox
2100 OFFICE SUPPLIES & EXPENSION AND CO 2110 EXPLOYEE PENSIONS & BENEFITS N AN CO	202 - Public Saltery 202 202206 06665107 202 - Public Saltery 202 202210 06665107	Labor Cost USD Dominana Involves 16 Istancials, SP - Gausses Protection Evenent for students 2	Labor OPER 2022 Voucher E 17270521 OPER 9000	821900 Labo 820003 New	or 340 Repuir Panol - NJ PA -Labor 880 Meterials & Equipment AP	71.26 50.38 22 45	5641     647 Telecon Services     00     11216     Simpson Service     CATE
GRIDO EMPLOYEE PENSIONS & BENEFITS N AA CD GRIDO EMPLOYEE PENSIONS & BENEFITS N AA CD	302 - Public Safety 302 202208 06960311 302 - Public Safety 302 202208 06962311	Parchase Invoices LE DET CORRECTION Parchase Invoices LE DET CORRECTION	Voucher 617270501 OPER 2022 Emoloyee Eag 617270501 OPER 2022	926263 Non- 926263 Non-	Habor 880 Miterials & Excitment AP Habor 235 Employee Misc Expenses AP		Image: state
0800 INFO AND INSTRUCT ADVERTIDAP AA CD 0800 INFO AND INSTRUCT ADVERTIDAP OR CO	302 - Public Salimy 302 202205 06660330 302 - Public Salimy 302 202206 06660330	Macalaneous Tossael Surde RcColi Inv M0064084202 (100-RCCH) Parchane Invoices US (2022 Pasa Marshrity - Call Int Bill Innert - OR	Voucher OPER 2022 Voucher 75881 OPER 9999	909000 Nor- 909000 Nor-	-Labor 915 Printing Labor 810 Advertising Expenses AP	10.46 5.46 1.462	2.58         1.42         Common-Company Comm (00)         EXT 8           1.68.2         N-Commany Communic (00)         B388         NetTOHAL COLOR 0, EXT 8           2.12.3         N-V - Network (Prevance)         B311         Image To Make and Col QUE 8
AGE INFO AND INSTRUCT ADVERTIDAP OR GD	202 - Public Safety 202 20205 06600300 202 - Public Safety 202 20205 Autorosov	Destinana Incidente 16 POSTAGE FOR AMSTR 2022 NATURAL GAS EXCAVATOR MALING Microlaneous Transad 2015 Sciencedor Malling Returns - \$152-POSTAG	Vaucher 85553-P OPER 2022 Vaucher OPER 9999	909000 Nan- 909000 Nan-	-Labor 910 Postage AP -Labor 910 Postage PA	2.112.1 935	2.112.1 (Pr Company Communic 00) 8211 Wall TO Mail But GCD CAT 8 105 (Or - Company Communic 00) CAT 9
66000 NFO AND INSTRUCT ADVERTIDAP OR GD	302 - Public Safety 302 202206 06800300 302 - Public Safety 302 202214 04840330	Punchana Invoices US   2022 - OR 811 Salety Eight Media - Madia Chrima Gaoga Punchana Invoices US   2022 - OR 811 Radio Media	Voucher 29483 OPER 2022 Voucher 29485 OPER 9000	909000 Non-	-Labor 810 Advertising Expenses AP -Labor 810 Advertising Expenses AP	8,141.57	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
10000 NFO AND INSTRUCT ADVERTIDIP OR GD	202 - Public Safety 202 202209 06800300 202 - Public Safety 100 000144	Puschase Involves LSI 2022 - OR 811 Radio Media Dumbasa Involves INI Oregon Smell Gas Radio	Voucher 2965 OPER 2022 Voucher 2958 OPER 2022	909000 Non-	Habor 810 Advertising Excenses AP	\$094. \$778	9.054. Or - Company Communic 001 2015 H4994 & ASSOCIATE CATE 9.779. Or - Communic Open 005 0445 Labour & BOSCIATE CATE
10000 NEO AND INSTRUCT ADVERTIDIP OR GD	202 Public Saliny 202 202112 06800300 202 Public Saliny 202 202112 06800300 202 Public Saliny 200 5000000	Purchase Inclose LE   OR SAFETY smell cas radio media Labor Cost LSD	Voucher 28671 OPER 2021 Labor 0000 0000	909000 Non- 921920	Alabor 810 Advertising Expenses AP	4.609. 71.20 50.10	4 488. Dr - Company Communic 001 2015 Hellel & ASSOCIATE CAT B 5641 647 Telecon Services 005
01000 OFFICE SUPPLIES & EXPENSES AA CD 01100 EMPLOYEE PENSIONS & BENEFITS N AA CO	202 - Public Salimy 202 20208 0980510 202 - Public Salimy 202 20209 0680510 +	Labor Cost USD Purchase Invoices US Misc. EP - Gauss Who came order for students	Labor OPER 2022 Engineer Eig E 122/2521 OPER 9000	921900 Labo 92003 North	or 343 Recular Panol - NJ PA -Lator 235 Employee Mic Expenses AP	4.489, 77.20 50.30 77.20 50.30 20. 14, 14 35255, 14,204,4 5000 409 43.82 22,86 0,455	4.68 (Concentrationame) (2012)     40994.8.4500C051 (2013)     8007     8451     4.61 Teacon Services (2014)     8007     4451     4.62 Teacon Services (2014)     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     1001     100      100
60000 NEO AND INSTRUCT ADVERT EXP. AA. CD 00000 NEO AND INSTRUCT ADVERT EXP. AA. CD	202 - Public Salimy 202 202209 09900300 202 - Public Salimy 200 000140	Dumhana Inninan IVI Auista 2022 School Maler and Websiles WAID/OR Porchane Inolose US Safe Eccuration Inner: Russian and Sannish translation	Contractor NV257 OPER 2022 Voucher N-X72552 OPER 2022	909000 Non-	-Labor 020 Professional Services AP -Labor 810 Advertising Expension 40	35.250 18.386.4 900 440	12.077. 4786.6 Common Common Common Common 201 8219 CLEVER COMPANY CAT B 307 522 Common Company Common Comm
0800 NFO AND INSTRUCT ADVERTIS/P AA CD 2000 ADMINIA CENSALARES //P	302 - Public Safety 302 202208 09660300 302 - Public Safety W0 000007 Assessed	Macalianeous Toomar( 5,1109 RCCH) inv M00458098020 ( 109-RCCH) Labor Cont USD	Voucher OPER 2022	909000 Nan- 920000 Nan-	-Labor 915 Printing PA or 340 Result Panol - N1 Da	43.82 22.86	1501 535 Common-Company Com/ 001 CATE 246348 Or - Company Communic 001 Mean
0800 NFO AND INSTRUCT ADVERTISHP OR GD	202 - Public Safety 202 202205 06800300 202 - Public Safety 100 000000	Puschase Invoice LS SALES TAX Microlenane Teamer C Into Dr Yuu in elementationary (gb-pp.com	Voucher 85006 OPER 2022 Voucher OPER 2022	909000 Non-	-Labor \$10 Advertising Expenses AP -Labor \$15 Printing Da	72.77	2.483.481 (Cr - Conseaux Communic) (001 8311 WINTS MMLING SER CMT B 72.771 (Cr - Conseaux Communic) (001 8311 WINTS MMLING SER CMT B 73.521 (Cr - Conseaux Communic) (001
0000 INFO AND INSTRUCT ADVERTISING OR GD	200 Public Salary 200 200111 06800300 202 Public Salary 202 202111 06800300 202 Public Salary 200 500140	Purchase Incides LD CR Smell Gas Diobi Ramers Purchase Incides LD CR Smell Gas Diobi Ramers	Voucher 2841 OPER 2021 Voucher 28674 OPER 2021	909000 Non-	Labor \$10 Advertising Expenses AP	6.010 6.016 6.060	2521 (Pr Commany Communic 001 2015 H446NA & ASSOCIATE CAT B 8.04529 (Pr Commany Communic 001 2015 H446NA & ASSOCIATE CAT B
00100         E46-UVIS F5600004 & 80647115 M         M         CD           0000         MCD AND METRIC / F06671 DEP         M         CD           0000         MCD AND METRIC / F06671 DEP         M         CD           0000         MCD AND METRIC / F06671 DEP         M         CD           0000         MCD AND METRIC / F06671 DEP         M         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         CD           0000         MCD AND METRIC / F06671 DEP         GD         GD           0000         MCD AND METRIC / F06671 DEP         GD         GD         GD           0000         MCD AND METRIC / F06671 DEP         GD         GD         GD         GD           0000         MCD AND METRIC / F06671 DEP         GD         GD         GD         GD         GD         GD         GD	202 - Public Salety 202 202060 00605107 102 - Public Salety 202 202000 00605107	Labor Cost USD	Labor OPER 2022	921900 Labo	or 340 Result Parol - NJ PA	71 50.38 71 50.38	16.41 6.47 Telecon Services 001     16.41 6.47 Telecon Services 001     16.4
00100 EMPLOYEE PENSIONS & BENEFITS N AA CD 00100 EMPLOYEE PENSIONS & DOLETTO N AA CD	202 - Public Salitry 202 202208 09902811 202 - Public Salitry 200 500008	Dumbase Involves 16: Istancials, 52 - Glassee Protective Eveneer for students Porthase Involces 15: Ista- 52 - Sunacces for students	Vauher E1232001 OPER 2022 Engineer Eag E1222021 OPER 2022	\$2000 Non-	-Labor 680 Materials & Equipment AP -Labor 205 Employee Mile: Extension 40	32.63 23.67 16.9 44.65	4.6 2.96 A and G Common Training 001 112965 Simpson Salina CAT B     242 1.52 A and G Common Training 001 112965 Generating Gains     CAT B
CIDDO OFFICE SUPPLIES & EXPENSES AA CD	202 Public Safety 302 20206 0980302 564 - Demonster Communications 564 20209	Purchase Inciden LD Male, Med at Afanta Alport Desthase Incident LD (1957) at 1957 (1954) 0	Employee Eao E 1660501 OPER 2022 Contractor 92424 OPER 2022	921208 Non-	-Labor 215 Employee Business Maals AP	0 0.	11         12         Teach Base         10         10         Teach Base         10         Teach Base         10         Teach Base         10
2000 OFFICE SUPPLIES & EXPENSES AM CO	S54 - Comparing American S54 20209 0980012 S54 - Comparing S54 20209 0980012 S54 - Comparing Communications 554 20209 0980015	Purchase Invoices LS US-TAR-USPOK-SALES Durchase Invoices LS US-TAR-USPOK-SALES	Contracture 1000000134200 OPER 2022	821000 Non- 921000 Non-	Alabor 000 Professional Services AP abor 000 Professional Services AP abor 0015 characterizes	200.9 276.35 257.55 10.004.00	2017 25.44 Vender/Process Support 01 19992 NURAD D DERMA D NE OTA 599.00 2 16.44 Vender/Process Support 01 19992 NURAD D DERMA D NE OTA
2000 OFFICE SUPPLIES & EXPENSES AM CD	900 2001 2000 2000 2000 2000 2000 2000 2	Vicentine inside LS US-Tax - OFFSPC OFFSFT     Derbase inside LS US-Tax - OFFSPC OFFSFT     Derbase inside LS US-Tax - OFFSPC OFFSFT	Contractor 100000198019 OPER 2021	821000 Non- 921000 Non-	Habor 000 Professional Services AP	10.000.00 0 000.00	
Urrue surrues a sAPENDED AN CD	Std - Constraint Communications 558 202112 09800015     Std - Constraint Communications 558 202112 09800015     Office Communications 558	Parchase Involves LIS US-Tax - OFFSPCK-OFFSST Parchase Involves LIS US-Tax - OFFSSCH-OFFSST Devices Involves LIS US-Tax - OFFSSCH-OFFSSCH-OFFSSCH	Ensize Sa 10720 OPER 2021	821000 Non-	Labor 235 Employee Misc Excenses AP	0 00	0. 0. Vendu Prozen Success 001 11101 Gali IV MAGE US B CALA
21000 OFFICE SUPPLIES & EXPENSIES AA CD	Std 20200 0960015 S54 - Consume Communications S54 20200 0960015	Destana invise IR (ETTE - ETC - SEC 6.4.5)	Contractor 100000117448 OPER 2022	921000 Non-	Labor 000 Professional Services AP	140.481 202.49 277.47	78.29 35.63 Vender Frauer aussers son 646 CORE CAR A RECAT A 78.29 35.63 Vender Rower Convert 0.00 110/02 ARDANN NIGTH AL RECAT A 0.00 1220 Vender Rower Convert 0.00
2000 OFFICE SUPPLIES A EXPENSES AM CD 2000 OFFICE SUPPLIES A EXPENSES AM CD 2000 OFFICE SUPPLIES A EXPENSES AM CD	554 20205 0960015 554 20205 0960015 554 20205 0960015	Parchase Inscise LE (SAES TAX	Contractor 2022-008 OPER 2022 Contractor 2022-008 OPER 2022	921000 Non-	-Labor 000 Professional Services AP	202.49 277.47 200. 272.09 27 19.09 300 292.09	solam 27.22 Vender/Hooram Sussents con 22886 CUTAWAY MEDIA not CAT A     5.46 2.45 Vender/Prozram SussentS con 22886 CUTAWAY MEDIA not CAT A
1000         OFFICE SUPPLIES & DOPINES         A.         CD	954 - Corporate Communications 554 202205 09960015 954 - Corporate Communications 554 202205 09960015	Perchase Invoices LS   Media monitoring Perchase Invoices LS   US-Tax - OFFSPCH-OFFSET OFFSET	Lonmadar 2021-058 OPER 2022 Contractor 1000001/22666 OPER 2022	921000 Non- 921000 Non-	scapor 020 Professional Services AP scabor 020 Professional Services AP	300 212.09 0 0.	90.58 27.22 Vendor/Prozram SuccentS 001 22696 CUTAWAY MEDIA not CAT A 0. 0. Vendor/Prozram SuccentS 001 110102 INTRADO DIGITH, MS not CAT A
1000         CFTPCS SUPPLIES & SUPPLIES         AM         CD		Destinana involves (K) (Media destitution and merencom Purchase involves (K) (US-Tax - USPCH-544,LS)	Contractor 100000128139 OPER 2022 Emoloyee Eao 17215876 OPER 2022	921000 Non- 921000 Non-	-Labor 020 Professional Services AP -Labor 235 Employee Misc Expenses AP	4.301 2.002.00 0 4.45	82.04 395.8 Vender/Prozent Success 01 119292 AITCATO INSTITUTE AE OF CATA 127 0.58 Vender/Prozent Success 01 111821 GETTY IMAGES US IN CATA
000         OFFCE SIPPERS & SCHOOLS         AM         CD           0000         OFFCE SIPPERS & SCHOOLS         AM         CD	SS4 - Corporate Communications SS6 20207 09900015		Contractor 100000137302 OPER 2022 Voucher 2022-034 OPER 2022	921000 Non-	-Labor 020 Professional Services AP -Labor 925 Subscriptions AP	4,362 3,083.5 27 19.09	882.28 385.92 Vendor/Prozram Succents 001 110102 INTRADO DIGITAL MS not CAT A 546 2.45 Vendor/Prozram Succents 001 22886 CUTAWAY MEDIA not CAT A
0000         COTCC SUPPLIES & LOPENESS         M         CO	DH - Concette Communications         Sci.         20200         0660015           SS4 - Concette Communications         Sci.         20220         0660015	Punthase Incides LS SALES TAX					
DOINT         DIVES 5/FAX & 1 A VOID         M         DI           DIVES 5/FAX & 1 A VOID         M         DI         M         DI         M         DI         M         DI         M         DI         M         DI         DI         M         DI         M         DI         DI <tddi< td="">         DI         DI</tddi<>	2011 Concerner Commission Series Series Concerner Series Concerner Commission Series Concerner Series Concer	Puchase Incluse LIS SALES TAX Labor ControlSD Labor ControlSD	Labor OPER 2021 Labor OPER 9999	\$20000 Labo	or 340 Recular Pantol - NJ PA or 340 Recular Pantol - NJ PA	4,782 3,387,58 3,599 2,564,41	728.04 226.69 Crement Comman Comm (0)1 800
0000         0001 <td< td=""><td>G42 - Disparse Communications 558 20207 0000011     S45 - Disparse Communications 558 20209 0000011     S45 - Disparse Communications 558 20209 00000011     S45 - Disparse Communications 558 202111 00000010     S45 - Disparse Communications 558 20201 0000010     S45 - Disparse Communications 558 20200 0000010     S45 - Disparse Communications 558 20200 0000010     S45 - Disparse Communications 558 20200     S45 - Disparse Communications</td><td>Puntam Index (d) 54:53 TAX LearC and (d) LearC and (d) LearC and (d) LearC and (d)</td><td>Labor OPER 2021 Labor OPER 2022 Labor OPER 2022 Labor OPER 2022 Labor OPER 2020 Labor OPER 2000</td><td>820000 Labo 820000 Labo 820000 Labo 820000 Labo 820000 Labo</td><td>or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA</td><td>4.782 3.367.51 3.599 2.664.41 2.905 2.603.89 6.480 4.595.29</td><td>Instance         Ves.1         Common Communication         Mode           282.04         292.03         (Common Communication)         Mode         Mode           687.04         283.01         (Common Communication)         Mode         Mode         Mode           587.04         283.01         (Common Communication)         Common Communication         Mode         Mode</td></td<>	G42 - Disparse Communications 558 20207 0000011     S45 - Disparse Communications 558 20209 0000011     S45 - Disparse Communications 558 20209 00000011     S45 - Disparse Communications 558 202111 00000010     S45 - Disparse Communications 558 20201 0000010     S45 - Disparse Communications 558 20200 0000010     S45 - Disparse Communications 558 20200 0000010     S45 - Disparse Communications 558 20200     S45 - Disparse Communications	Puntam Index (d) 54:53 TAX LearC and (d) LearC and (d) LearC and (d) LearC and (d)	Labor OPER 2021 Labor OPER 2022 Labor OPER 2022 Labor OPER 2022 Labor OPER 2020 Labor OPER 2000	820000 Labo 820000 Labo 820000 Labo 820000 Labo 820000 Labo	or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA or 340 Resulte Panol - NJ PA	4.782 3.367.51 3.599 2.664.41 2.905 2.603.89 6.480 4.595.29	Instance         Ves.1         Common Communication         Mode           282.04         292.03         (Common Communication)         Mode         Mode           687.04         283.01         (Common Communication)         Mode         Mode         Mode           587.04         283.01         (Common Communication)         Common Communication         Mode
0000         00100	SAL - Conversion Communication         SAL         202027         0000011           SAL - Conversion Communication         SAL         202028         0000011           SAL - Conversion Communication         SAL         202028         0000011           SAL - Conversion Communication         SAL         202018         0000001           SAL - Conversion Communication         SAL         202018         0000000           SAL - Conversion Communication         SAL         202018         0000000           SAL - Conversion Communication         SAL         202028         0000000           SAL - Conversion Communication         SAL         202028         0000000           SAL - Conversion Communication         SAL         202018         0000000	Proteina Industri di Secta 194 Lando Carlos De		82000 Labo 82000 Labo 82000 Labo 82000 Labo 82000 Labo 82000 Labo		4 792 3.347.55 3.599 2.564.41 2.905 2.653.89 6.488 4.585.29 5.954 3.954.30 3.776 2.847.90	22020         2020         Common-Ammonia
	64-         Course Communitieres         64         2020"         986010           64-         Course Communitieres         64         2021"         986010	Notation Investigation (2014)	Labor OFFR 2021 Labor OFFR 2022 Labor OFFR 2022 Labor OFFR 2024 Labor OFFR 2024 Labor OFFR 2024 Labor OFFR 2024	10000     1000     1000     10000     1000     10000     100     10000     100     10000     100     10000     100     10000     100     10000     100     10000     100     10000     100	240 Resolut Panni - NJ PA     340 Resolut Panni - NJ PA     350 Resolut Panni - NJ PA     350 Resolut Panni - NJ PA     360 Resolut Panni - NJ PA	4 312 3.367.5 3.569 2.564.41 2.865 2.653.89 6.480 4.405.20 5.664 3.964.30 3.778 2.662.20 5.679 3.564.9 5.679 3.564.9	1202.0         328.88         Provide Transmission Control Provide Office         Main           1571.88         1571.88         1571.88         Main           1571.88         158.71         Control Control Control Control Office         Main           1572.88         1572.93         Control C
	24.1	Marcine Marcine (Marcine)         Marcine (Marcine)	Later         0/5/2         2021           Later         0/5/2         2022           Later         0/5/2         2022           Later         0/5/2         2022           Later         0/5/2         2022           Later         0/5/2         2021           Later <td< td=""><td>20000     20000     20000     20000     20000     200000     20000     20000     20000     20000     20000     20000</td><td>cz         340 Piskulie Ponici + NJ         PA           cz         340 Piskulie Ponici + NJ         PA</td><td>4 (782) 1.509 2.046.41 2.2055 2.053.80 6.404 4.553 5.604 1.505.30 5.70% 2.602.50 5.67% 1.5654 5.67% 1.5555 7.664.45 5.682.01 5.67% 1.5552 7.664.45 5.682.20 7.703.27 7.664.45 5.682.20 7.703.27 7.703.2</td><td>2016         3018         Ammon Ammon</td></td<>	20000     20000     20000     20000     20000     200000     20000     20000     20000     20000     20000     20000	cz         340 Piskulie Ponici + NJ         PA	4 (782) 1.509 2.046.41 2.2055 2.053.80 6.404 4.553 5.604 1.505.30 5.70% 2.602.50 5.67% 1.5654 5.67% 1.5555 7.664.45 5.682.01 5.67% 1.5552 7.664.45 5.682.20 7.703.27 7.664.45 5.682.20 7.703.27 7.703.2	2016         3018         Ammon
		Notass         National (National National Nationa Nationa National National Nationa National National National Nat	Labor         COSR         2011           Labor         COSR         2012	20000 Lais 20000	col         3403 Resource Parolit - 342         PA	4 702 3.367 8 3.066 2.044 4 2.044 4 3.061 2.044 4 3.064 4 5.064 3.045 8 5.064 3.045 8 5.776 2.045 8 5.776 3.045 8 5.776 3.045 8 5.776 3.045 8 5.709 3.045 8 7.764 4 5.002 11 3.753 2 7.764 4 5.002 11 3.753 2 7.765 4 5.002 1 7.765 4 5.002 11 3.753 2 7.765 4 5.002 11 3.755	13.16         13.16         (annu-harmonic frame)
		Name         Name           Name <td></td> <td></td> <td>Nor- box         Nor- box         Nor- box</td> <td></td> <td>Desc         Desc         <thdesc< th="">         Desc         Desc         <thd< td=""></thd<></thdesc<></td>			Nor- box		Desc         Desc <thdesc< th="">         Desc         Desc         <thd< td=""></thd<></thdesc<>

	90200 MSC GENERAL EXPENSE AA CD	SS4 - Comparise Communications SS4 202110 09800200 Partness Isolans LS WELLY CONLEY-SP. CON P22A OVENS	Ensister Six 850139-CC OPER	2021 930200 Non-Labor 235 Employee Misc Excesses #P	303.42 26.29 79.73	25.4 Common-Company Come 001 6445 CORP CREDIT CARE NO CAT A
	921000 OFFICE SUPPLIES & EXPENSES AA CD 900000 MISC GENERAL EXPENSE AA CD	S44 - Cupprate Communications S48 20200 (0660200 Purchase trucions LG (New ANDERSCH-APPLE STORE Field) S45 - Comparise Communications S48 20200 (0660200 Purchase trucines LG (New ANDERSCH-APPLE STORE Field)	Voucher 9021428-CC OPER Contractor 221926 OPER	2022 821000 Non-Labor 880 Miterials & Equipment AP 2022 830200 Non-Labor 020 Professional Services AP	20.71 54.66 4.19 225 159.00 45.51	1.88 Common-Company Come (01 6445 CORP CREDIT CARE not CAT A 20.43 Common-Company Come (01 1803 LISA MOCATHREN DI not CAT A
	821000 OFFICE SUPPLIES & EXPENSES AA CD 821000 OFFICE SUPPLIES & EXPENSES AA CD	Sk4 - Osnozak Communications         Sc4         20206         0660030         Punchass Involves LS         0.944.MDSREGOWSTAPLES         0690261           Sk4 - Osnozak Communications         Sc4         20205         0660030         Dunchass Involves LS         0.944.MDSREGOWSTAPLES         0690261	Vouder KAMADECC OPER Vouder KATANDECC OPER	202 82100 Non-Labor 880 Office Supplem AP 2022 82100 Non-Labor 880 Office Supplem AP	30.98 21.9 6.27 90.99 64.33 19.41	231 Common-Company Comr 001 6445 00RP CREDIT CARE Int CAT A 835 Common-Common Comr 001 6445 COMP CREDIT CARE Int CAT A
	S2000 ADMINE GENSALARIES AA CD S2000 ADMINE GENSALARIES AA CD	Side - Concoste Communicatione Side 20206 0000031 Labor Cost USD Side - Concoste Communicatione Side 20206 0000031 Labor Cost USD	Labor OPER Labor OPER	2022 82000 Labor 340 Repuir Payol - NJ PA 2022 82000 Labor 340 Repuir Payol - NJ PA	5406.03 3.821.79 1.083.53 6(279 4,287.48 1,229.64	480.71 Internal Company Commu 001 Internal Company Commu 001 Internal Company Commu 001 Internal Internal Company Commu 001
	S0000 ADMINE GENSALARES AA CD	564 - Dolovale Communication 564 20110 (566000) Labor Cont 150 564 - Concourse Communication 564 20202 (566000) Labor Cont 150	Lator OPER	2021 R0000 Labor 340 Hebular Pantol - NJ PA 2022 R0000 Labor 340 Recular Pantol - NJ PA	5.115.75 3.540 1.056.7 7.266.25 5.125.46 1.469.41	4/n.13 Internal Constant Control 001 Boor 659.38 Internal Constant Control 001 Boor
	SCIDIO ADMINISTRATAVINIST AL CO SCIDIO OFFICE SUPPLIES A EXPENSES AA CO SUPPLIE AL COLORAD EXECUSES AA CO	Sel - Donotek Contractions Sel 20039 0060231 Canada Anna Canada Can A Canada Ca	Employe Example CC OPER	2022 R0000 Non-Labor 000 Hitescent Services AP 2022 921000 Non-Labor 235 Employee Max Expenses AP 2021 920000 Labor 940 Deputy NJ Day	900 000.00 102.05 105.69 101.13 372.05 2.051.1 1.455.73 456.47	150.09 Packate Contrast Communication (20) 150.094 Packate Charles (20) A 200
	90000 MSC GENERAL EXPENSE AA CD 90000 MSC GENERAL EXPENSE AA CD	St4 - Concente Communications     St4     201112     09999035     Later ConcentSD     St4     Concente Communications     St4     201112     09999035     Later ConcentSD	Labor OPER Labor OPER	2021 830000 Labor 205 Incentive/Bonus Pay PA 2021 830000 Labor 340 Regular Payoli - NJ PA	3.000 2.099.56 620.85 1.154 807.9 228.77	279.21 Corporate ECP Pandemic 001 Mahor 197.37 Corporate ECP Pandemic 001 Mahor
	90800 NEO AND INSTRUCT ADVERT EXP. OR GD.	564 - CONDINGE COMMUNICATIONS 564 202308 00665038 Labor Cont 1550 554 202311 00665038 Labor Cont 1550 EV.	Labor OPER Voucher 24676 OPER	2022 90000 Labor 343 Result Pantil - NJ PA 2021 90000 Non-Labor 915 Printing AP	1.065.12	1.065.12 OR Adv for Conservation 001 Bills NATIONAL COLOR G CAT A
	909000 INFO AND INSTRUCT ADVERTIEXP OR GD 909000 INFO AND INSTRUCT ADVERTIEXP OR GD	SE4 - Copuse Communications IS6 20201 0065020 Purchase Invoices LS Holding 2001 ecants     SE4 - Copuse Communications IS6 20208 0065020 Purchase Invoices LS Holding Heaviter	Contractor 211917 OPER Contractor 77572 OPER	2022 909000 Non-Labor 000 Professional Services AP 2022 909000 Non-Labor 000 Professional Services AP	-225. 2.435	225. OR Adv for Conservation 001 1803 LISA MCCATHREN DI CAT A 2.405 OR Adv for Conservation 001 8988 NATIONAL COLOR G CAT A
	90800 INFO AND INSTRUCT ADVERT DIP OR GD 908000 INFO AND INSTRUCT ADVERT DIP OR GD	Side - Consorte Communications Side 20208 ORESOR Perchame Involves IIG UST-Tax - OFFSDOK-OFSET-OFSET Side - Consorted Communications Side 20208 ORESOR Devices Involves IIG UST-Tax - OFFSDOK-OFSET OFSET-O	Contractor 77572 OPER Contractor 78156 OPER	2022 909000 Non-Labor 0.00 Professional Services AP 2022 909000 Non-Labor 0.00 Professional Services AP	0. 2729	OR Adv for Conservation 001 8988 NATIONAL COLOR G CAT A     2729. OR Adv for Conservation 001 8988 NATIONAL COLOR G CAT A
	S0000 MSC GENERAL DIPENSE AA CD 20200 MSC GENERAL DIPENSE AA CD	Side - Concrete Communications Side, 2011;12 00660330 Purchase Invoices LS (DAM) ADD/RECIVEFACEB(M):CA289(71) Side - Concrete Communications Side 20200 00660330 Purchase Invoices LS (DAM) ADD/RECIVEFACEB(M):CA289(71)	Vouder 878649-CC OPER Contractor 1269 OPER	2021 930200 Non-Labor 813 Advertising Expenses AP 2022 930200 Non-Labor 020 Professional Services AP	140 97.91 28.95 1,500 1,660.43 203.42	1302 Customer Education Gene 001 6445 COSP CREDIT CARE Not CAT A 136 15 Customer Education Gene 001 154192 MRCE ELLES CAT A
	20200 MSC GENERALEPENSE AA CD 20200 MSC GENERALEPENSE AA CD	Sel- Concrete Communications Sel- 20200 00660370 Parchase function Sel- 2020 0066037 Par	Veadwr OPER Contractor 5458 OPER	202 K0000 Nor-Labor 915 Pretina PA 2022 K0000 Nor-Labor 000 Professional Services AP	254 179.21 51.28 1.500 1.060.43 203.42	22 Customer Education Gener 001 CAT A 136.15 Customer Education Gener 001 1561952 MIKE ELLIS CAT A
	SCIEDU MEL GANAROL SUPINIA AN CD S21000 OFFICE SUPINIES A EXPENSES AN CD	564 - Dolovale Communications 564 20203 Gelecitaria Contractor and Social Media Contractor and Social Media Calorimeter Contractor Media Calorimeter Contractor Media Calorimeter Contractor Media Calorimeter Contractor Media Calorimeter Calorimete	Labor OPER	2022 INSIDO NOVALIDO DO PORECON DEPONIONA AP 2022 ISDIGO Labor 240 Recular Parente NJ PA	71.26 10.00 43 201.42 71.26 50.38 54.41	138.15 Foldow Services 001 104102 MRS-6125 DOLA
	SCIDIO CIFFICE SUPPLIES & EXPENSION AND CO	204 - Colgonade Communications     304 2021     304 2020     304 200 200 200 200 200 200 200 200 200 2	Later Disk Later OPER	2021 821000 Labor 340 Hague Payos NJ PA 2022 821000 Labor 340 Result Payos NJ PA 2020 00000 Labor 340 Result Payos NJ PA	71.26 40.48 56.75 71.26 50.20 54.41	6.03 Telecon Services 001 Biogram     6.07 Biogram Biogram     6.07 Biogram Biogram     6.00 Biogram
	91000 CLIST SVCA NO DIP-MICC AA CD	264 - Document Communications 654 202111 00002730 Laker Const 1550     564 - Document Communications 656 202111 00002730 Laker Const 1550	Labor OPER	2012 Resold Labor 240 Result Partiel NJ PA 2021 910000 Labor 240 Result Partiel NJ PA 9001 840000 Labor 240 Result Partiel NJ PA	2214.85 1155.20 756.7 1 007.25 055.15 014.29	202.02 (Annu Martin Column Col
	91000 CLET SVC & NFO EXP 485C AA CD	554 - Copyonale Communicatione 554 20202 09602730 Labor Conc 1550 056 - Copyonale Communicatione 554 202020 09602730 Labor Conc 1550	Labor OPER	2022 910000 Labor 343 Repute Payoli - NJ PA 9000 (abor 343 Repute Payoli - NJ PA	2,879.31 1,501.85 598.48 1,711.00 892.45 598.7	200.58 Common Sales and Barks Oct Babor 202.53 Common Sales and Barks Oct Babor
	91000 CLIST SIC & NEO EXP-MISC AA CD 91000 CLIST SIC & NEO EXP-MISC AA CD	S64 - Conceste Communications     S64     20202     09660730     Laker Cent USD     S64     Conceste Communications     S64     20202     09660730     Laker Cent USD	Labor OPER	2022 910000 Labor 340 Resulte Pantol - NJ PA 2022 910000 Labor 340 Resulte Pantol - NJ PA	4.357.65 2.372.86 1.482.97 5.709.2 2.977.92 1.966.02	591.73 Common Sales and Marke 001 Moor Address Common Sales and Marke 001 Moor Address Common Sales and Marke 001 Moor
	91000 CLET SVC & NEO EXP-MEC AA CD 90000 INFO AND INSTRUCT ADVERT EXP OR GD	564 - Concepts Communications         564         202027         Miscalenous Instruct 1985         400-PGT-ML           564 - Concepts Communications         564         202173         04805164         Purchase Inscient LG OF Rate Customer Noise Adjacement In-design	Voucher OPER Voucher 28170 OPER	2022 910000 Non-Labor 885 Miscelaneous PA 2021 900000 Non-Labor 810 Advertising Expenses AP	25. 13.04 8.57 50	3.39 Common Sales and Markel 001 not CAT A 50. Customer Education Oce 001 2015 HANNA & ASSOCIATE CAT A
	S0000 MSC GENERAL EXPENSE AA CD S21000 OFFICE SUPPLIES & EXPENSES AA CD	564 - concente Communications 564 20112 0000012 Punchase Involuse 52 2011 Annual Report 556 20110 0000015 Punchase Involuse 12 2011 Annual Report	Contractor 19855 OPER Voucher 854039-CC OPER	2021 80000 Non-Labor 000 Professional Services AP 2021 82100 Non-Labor 835 Non-Vehicle Equip Repair AP	2.290. 1.002.95 473.92 1.306.8 914.73 270.44	213.13 Annual Report 001 22242 KLUNDT HOSMER DI not CAT A 121.60 Vender/Program Support5 001 6445 CORP CREDIT CARE not CAT A
	921000 OFFICE SUPPLIES & EXPENSES AA CD 921000 OFFICE SUPPLIES & EXPENSES AA CD	SE4 - concepts Communications         SE4         202111         Objections         Development         Set Marco         Set Marco </td <td>Contractur 100000096668 OPER Engineer Exp 1076665 OPER</td> <td>2021 92100 Non-Labor 000 Professional Services AP 2021 92100 Non-Labor 235 Employee Mito: Expenses AP</td> <td>4.208.53 2.665.89 870.96 0. 0. 0</td> <td>291.68 Vander/Prozent Genovell (0) 193922 AITDADO DIGITAL AK INCIDENTAL 0. Vender/Prozent Successf (0) 111931 GETTY IMAGES US &amp; CAT A</td>	Contractur 100000096668 OPER Engineer Exp 1076665 OPER	2021 92100 Non-Labor 000 Professional Services AP 2021 92100 Non-Labor 235 Employee Mito: Expenses AP	4.208.53 2.665.89 870.96 0. 0. 0	291.68 Vander/Prozent Genovell (0) 193922 AITDADO DIGITAL AK INCIDENTAL 0. Vender/Prozent Successf (0) 111931 GETTY IMAGES US & CAT A
	921000 OFFICE SUPPLIES & EXPENSES AA CD 921000 OFFICE SUPPLIES & EXPENSES AA CD	S54 - Copuse Communications      S54 203112 09600015 Purchase Invoices LS (pra.     S54 - Copuse Communications      S54 20205 0960015 Purchase Invoices LS (India definition and newsrom	Voucher 1219418 OPER Contraction 1000000110821 OPER	2021 92100 Non-Labor 885 Miscellaneous AP 2022 92100 Non-Labor 000 Professional Services AP	200. 101.09 53.81 4.346.25 3.072.58 879.16	24.2 Vendor/Prooram SuccostS 001 6756 PRSA not CAT A 365 Vendor/Prooram SuccostS 001 110102 NTRADO DIGITAL ME not CAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD S2100 OFFICE SUPPLIES & EXPENSES AA CD	St4+ consume Communications S54 20205 0960015 Purchase Involute LS USTAR: OFFSET SFCK-OFFSET     St4+ consume Communications S54 20205 0960015 Durhase Turnions (S4EE) TXK	Contractor 1000000110821 OPER Contractor 2021-087 OPER	2022 92100 Non-Labor 000 Professional Services AP 2022 92100 Non-Labor 000 Professional Services AP	0, 0, 0, 0, 267 18.88 5.4	O. Vender/Prozent SupportS 001 110102 NTRADO DIGITAL M Ret DAT A     2.42 Vender/Droman GenoretE 005 22086 CUTAWAY MEDIA Ret CAT A
	821000 OFFICE SUPPLIES & EXPENSIES AA CD 821000 OFFICE SUPPLIES & EXPENSIES AA CD	Side - Concoste Communications Side, 202305 00600015 Purchasa funciona LS (UST-Int - USPOK-SALES) Side - Concoste Communications Side 202306 00600015 Purchasa funciona LS (UST-Int - USPOK-SALES)	Contractor 1000000122666 OPER Contractor 2022-029 OPER	2022 821000 Non-Labor 000 Professional Services AP 2022 821000 Non-Labor 000 Professional Services AP	292 276.52 79.24 27 19.09 5.46	26.55 VenderProzram SuspentS 001 110102 INTRADO DIGITAL ME not CAT A 2.45 VenderProzram SuspentS 001 22086 CUTAWAY MEDIA not CAT A
	82100 OFFICE SUPPLIES & EXPENSES AA CD 821000 OFFICE SUPPLIES & EXPENSES AA CD	Side - concente Communications Side, 202006 00600015 Purchase Invoices LS (US-Tar- USP 0K-6ALES) Side - concente Communications Side, 20207 00600015 Purchase Invoices LS (US-Tar- USP 0K-6ALES)	Contractor 1000000128138 OPER Emoloyee Eao 17804519 OPER	2022 821000 Non-Labor 000 Professional Services AP 2022 821000 Non-Labor 225 Emolouve Misc Expenses AP	202 277.44 79.38 75 49.49 54.16	3543 VenderProzen SuspertS 001 119102 NTRADO DIGITAL ME not CAT A 6.35 VenderProzen SuspertS 001 111621 GETTY IMAGES US IN CAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD S2100 OFFICE SUPPLIES & EXPENSES AA CD	Side consolid Communications Side 20207 00000015 Durchase haviours 10 UST-14 USP 04:44LD Side consolid Communications Side 20209 0000015 Purchase haviours 10 UST-14 USP 04:44LD	Contractor 17804519 OPER Contractor 17807036 OPER	2022 821000 Non-Labor 215 Employee Mile: Expenses AP 2022 821000 Non-Labor 000 Professional Services AP	6 4.45 1.27 6.3 4.45 1.27	0.58 VenderProzen Success 01 111821 / ZETTV BACEGUS N CATA 0.58 VenderProzen Success 01 111821 / GETTY INAGESUS N CATA
	S0000 ADMINE GENERATING AN CD	564 - Coposite Communication 564 20202 Colemon Labor Cost USD 564 - Coposite Communication 564 2075 0 6660000 Labor Cost USD 564 2075 0 666000 Labor Cost USD 564 2075 0 6660000 Labor Cost USD 564 2075 0 66600000 Labor Cost USD 564 2075 0 66600000 Labor Cost USD 56600000 Labor C	Labor OPER	2022 82000 Labor 340 Hapter Faylor - NJ PA 2021 82000 Labor 340 Recuter Paylor - NJ PA	4,298.9 2,024.96 BB5.53 7,842 5,489.36 1,622.94	729.86 Common-Company Contr Off Boor
	2000 ADMIA GENSALARES AA CD	Set - Consent Commission and Set 20209 General Laker Controls	Labor OPER	2022 92000 Labor 340 Realin Paral NJ PA	4452.25 4.501.41 1.305.15	
	S2000 ACMINE GENSALARES AA CD	654 - Ouppoint Communication     654 - 20200     69000000 Laker Constitut     60     6000000 Laker Constitut     60	Labor OPER	2022 82000 Labor 340 Result Factor PA	12,600 8,907.58 2,548.73	1,143.69 Common-Company Comit 001 bibor
	920000 ADMINA GENSALARES AM CD	SS4 - Consents Formations SS4 20229 0000000 Labor Cost USD SS4 - Consents Formations SS4 20229 0000000 Labor Cost USD SS4 - Consents Formations	Labor OPER	2022 920000 Labor 340 Recular Panol NJ PA 2022 920000 Labor 340 Recular Panol NJ PA 9029 920000 Labor 540 Recular Panol VI PA	28/234 78/24 10/859 7.78/239 22/8/77 7.78/239 7.78/239	Semantic Common Commany Long (01) Ibbor 994.72 Common Company Comt (01) Ibbor 704.6 Company Company Comt (01)
	920000 ADMINA GENSALARES AA CD 920000 ADMINA GENSALARES AA CD	SS4 - Consortie Communications SS4 20220 0980030 Labor Cost USD SS4 - Consortie Communications SS4 20220 0980030 Labor Cost USD	Labor OPER Labor OPER	2022 920000 Labor 340 Recular Marcin NJ PA 2022 920000 Labor 340 Recular Panol NJ PA 2022 920000 Labor 540 David NJ PA	7.0024 5.007.01 1.570.21 10.07.28 7.01.0 1.432.03	642.66 Common-Company Comt 001 Babor 642.69 Common-Company Comt 001 Babor
	S2000 ADMINE GENSALARES AA CD S2000 ADMINE GENSALARES AA CD	564 - Consorte Communications 568 20210 09880300 Laker Cent 16D     564 - Consorte Communications 568 202110 09880300 Laker Cent 16D	Labor OPER Labor OPER	2022 820000 Labor 340 Reular Panol - NJ PA 2021 820000 Labor 340 Reular Panol - NJ PA	6 124.42 4 329.66 1 228.85 12.60.4 8.455.06 9.451.64	555.91 Common-Company Comr 001 Maker 1.12152 Common-Company Comr 001 Maker
	SCODO ADMINA GENSALARIES AA CD SCODO ADMINA GENSALARIES AA CD	SS4 - Consolide Communications SS8 20201 09800330 Labor Cont USD SS4 - Consolide Communications SS8 202110 09800330 Labor Cont USD	Labor OPER Labor OPER	2022 920000 Labor 343 Reular Paroli - NJ PA 2021 920000 Labor 343 Reular Paroli - NJ PA	2,055,13 1,450,05 4,54,9 8,092,09 5,657,66 4,55,76	186,18 Common-Company Come 001 Islaw 192,29 Common-Company Come 001 Islaw
	920000 ADMINE GENSALARES AA CD 920000 ADMINE GENSALARES AA CD	SS4 - Corporate Communications         SS4         20201         08800300         Laker Court USD           SS4 - Consolté Communications         SS4         20203         08800300         Laker Court USD	Labor OPER Labor OPER	2022 820000 Labor 340 Reputer Payroll - NJ PA 2022 820000 Labor 340 Reputer Payroll - NJ PA	5,266.97 3,736.21 1,068.04 6.320 4.472.45 4.035.74	479.72 Common-Company Comr 001 Ibdor 574.24 Common-Company Comr 001 Ibdor
	920200 MSC GENERAL EXPENSE AA CD 921000 OFFICE SUPPLIES & EXPENSES AA CD	S64 - Ducopate Communications S68 20211 00600230 Purchase hybridus Lis temptatenal headen support S64 - Ducopate Communications S64 20219 00600230 Diversas hubridus 16 DAM ARCREDON STRUES 0010554	Contractor 211919 OPER Voucher 854042P-CC OPER	2021 820200 Non-Labor 020 Professional Services AP 2021 821000 Non-Labor 885 Miscelaneous AP	75. 52.5 15.52 289.5 174.65 51.63	6.98 Cammon-Company Comr 001 1903 LISAMOCATHREN DI CAT A 23.22 Common-Company Comr 001 6445 CONRO (CEDIT CAD) at CAT A
	90000 MISC GENERAL EXPENSE AN CD 921000 OFFICE SUPPLIES & EXPENSES AN CD	SS4 - Consorte Communications SS4 201110 09900330 Punchase Invoices LB Seninar, Podcaste for Cosporate & Internal Communications Seninar     SS4 202111 09900330 Punchase Invoices LB DAM ANDERSON/STAPLES 00105254	Voucher E1697501 OPER Emoloves Exa 855939-CC OPER	2021 900000 Non-Labor 950 Trainino AP 2021 921000 Non-Labor 235 Employee Misc Expenses AP	1.422 995.37 294.28 120.65 84.59 25.01	122.35 Common-Company Come 001 96584 Smith Brandon R ext CAT A 11.25 Common-Company Come 001 6445 CORP CREDIT CARE not CAT A
No.         No.        No.        No.        No.	921000 OFFICE SUPPLIES & EXPENSES AN CD 921000 OFFICE SUPPLIES & EXPENSES AN CD	SS4 - Consolite Communications SS4 20201 09800330 Punchase Involves LS DAWA ANDERRON-CFFICE DEPOT Mills     SS4 - Consolite Communications SS4 20201 09800330 Punchase Involves LS DAWA ANDERSON-STAPLES 001980351	Ensitives Exc 8889439-CC OPER Vourber 8889439-CC OPER	2022 921000 Non-Labor 225 Emoloses MP 2022 921000 Non-Labor 880 Office Suzoles AP	106.47 72.06 21.13 100.07 120.16 24	9.48 Common-Company Come 001 6445 CORP CREDIT CARE and CAT A 15.43 Common-Company Come 001 6445 CORP CREDIT CARE and CAT A
	90000 MSC GENERAL EXPENSE AN CD 92000 OUTSEE SERVICES EMPLOYED AN CD	SS4 - Consolie Communications SS4 20206 09800330 Parments USD Discourt Databadions     SS4 - Consolie Communications SS4 20209 09800330 Parchaes Inscises US Materials to support the Energy Pathware student program	Contractor OPER Contractor 29827 OPER	2022 900000 Nen-Labor 000 Professional Services AP 2022 92000 Nen-Labor 020 Professional Services AP	-2819.79 -5.66 8.881.05 -6.278.46 -1.798.46	-2.55 Common Company Come (0) 29805 In Call Ball Darith CAT A 806.13 Common Company Come (0) 2915 HANNA & ASSOCIATE NO CAT A
	1628000 ADMINE GENSALARIES AA CD 520000 ADMINE GENSALARIES AA CD	todcorporate communications 556 20220 0060021 Labor Cont USD 554 - Consorte Communications 558 202112 00600231 Labor Cont USD	Labor OPER	2022 920000 Labor 540 Regular Payoli - NJ PA 2021 920000 Labor 540 Regular Payoli - NJ PA	6,191.53 4,377.1 1,252.42 3,003 2,578 702	bez.on (Internal Company Commu (001 babor 343) Internal Company Commu (001 babor
	SCROOT ADMINA GENSALARIES AA CD SCROOT ADMINA GENSALARIES AA CD	tord - Cotostate Communications 559 (202110) 09800221 Purchase Invoices LB View design 554 - Constante Communications 558 (20201) 09808035 Labor Cost USD	Contraction 21-5007 OPER Labor OPER	2021 920000 Non-Labor 020 Professional Services AP 2022 920000 Labor 340 Resular Pavoll - NJ PA	900, 629.98 196.29 559.29 259.30 102.61	INT. IN Internal Company Commu (01 100754 CREATIVE CATCH ST and CAT A 46.54 // Innovata C/VP Devolution: (02)
	101000 MEC GENERAL DIPENSE AA CO 202000 MEC GENERAL DIPENSE AA CO	Isol - Lucosofe Communications Isol 20112 06666455 Lakor Con USD ISol - Cognitial Communications ISol 20111 066666455 Lakor Con USD	Labor OPER Labor OPER	2011 x00000 Labor 205 Incentive/Bonue Pay 2021 800000 Labor 340 Regular Paytol - NJ PA	2,000 1,399,96 413.9 1,367 967,16 282,98	199.14 Corporate ECP Pandemic 001 labor 127.26 Corporate ECP Pandemic 001 labor
	80800 MSC GENERAL DIPENSE AA CD 80800 NFO AND INSTRUCT ADVERT DIP OR GD	Side - Docoste Communicatione Side 2020h 0666035 Labor Cost USD Side - Docoste Communicatione Side 2020h 0666035 Labor Cost USD	Labor OPER Labor OPER	2022 80000 Labor 340 Repuir Panti - NJ PA 2022 80000 Labor 340 Repuir Panti - NJ PA	646524 4.591.81 1.213.86 684	SB52 Corporate ECP Pandemic 001 Bibor 686.36 CR Adv for Conservation 001 Bibor
	90800 INFO AND INSTRUCT ADVERTIDIP OR GD 90800 INFO AND INSTRUCT ADVERTIDIP OR GD	Side consolie Communicatione Side 20206 Obliditional Labor Const USD Side Consolie Communicatione Side 20206 Obliditional Labor Const USD Side Consolie Construint Construint Const Side 20206 Obliditional Labor Const USD Side Const USD Side Const USD Side Const USD Side Const	Labor OPER Labor OPER	2022 90000 Labor 340 Result Panol - NJ PA 2022 90000 Labor 340 Result Panol - NJ PA	456 715.08	466 OR Adv for Conservation 001 bibor 710.08 OR Adv for Conservation 001 bibor
	90000 INFO AND INSTRUCT ADVERTIS/P OR GD	544 - Colocade Communications Sole 202264 ObleColori Purchase Inscala LG (gene colorizatione) and Sole 202264 ObleColori Purchase Inscala LG (gene colorizatione) and Sole 20226 ObleColori Purchase Inscala LG (colorizatione) colorizatione) and Sole 2022	Contractor 221919 OPER	2022 ISOBOO NER-Labor ISTS Hitting AP 2022 ISOBOO Ner-Labor 020 Professional Services AP	106.	105. OR Adv to Conservation 001 IBBIE NATENCE CELER & ON A 105. OR Adv for Conservation 001 1803 LESAMOCATHREN DI CAT A
	S0000 INFO AND INSTRUCT ADVARTIS/IP OR GD S0000 MSC GENERAL SUPENSE AA CD	Sele-Colorade Communications Sele 2020b ObleColor Purchase Inscale LD (NCA) Ask to Imade     Sele-Colorade Communications Sele 2020b ObleColor Durations functions (Second Selections)     Selections (Second Selections)	Contractor 128 OPER	2022 ISOBOD Non-Labor IFG Advertising Sciences AP 2022 ISOBOD Non-Labor 000 Professional Services AP	4.803 1.500 1.080.43 303.42	136.15 Contrast Conservation Oct 2015 Honey & Association Oct A
	SILDO MECGINENE A CD 90200 MECGENERE A CD	Sof - Compared Continuentations Sof 20006 09605.10 Publication Control	Vouter 0PSR 0PSR	2022 K0000 Non-Labor DD Protection Services AP 2022 \$20200 Non-Labor \$15 Printing PA	1.500 1.000.43 201.42 659.24 460.05 122.35	136.15 Customer Education Gaine Ott 104762 MRG ALLER CAT A 59.04 Customer Education Gaine Ott Cat A 60.04 Customer Education Gaine Ott
No.         No.        No.        No.         No.	SCIED MEC GANAGE SPINIS AN CD S2100 OFFICE SUPPLIES & EXPENSES AN CD	564 - Dolovale Communications 564 20208 (3666147) Publications Inc. action of the accurate outwards and accura	Labor OPER	2022 INStatu Michael UD Homesone AP 2022 IS2100 Labor 340 Reader Panol - NJ PA	1505 1500 43 20142 71.26 50.38 54.41	138.15 Cultomer Education Services 001 104192 MRS-ELLS DOLA 6.47 Telecom Services 001 bbor
	SCIDD CHH2LSDPLAS & SPENSS AA CD S2000 ADMIA GENSALARES AA CD	564 - Loborate Communication 564 20208 066010 Labor Cont USD 564 20207 0660360 Labor Cont USD 564 20207 0660368 Labor Cont USD 554 20207 0660368	Later OPER	2022 82160 Labor 340 House Pand - NJ PA 2022 92000 Labor 340 Realiz Pand - NJ PA	71.26 50.38 54.41 891.02 600.48 592.4	8.47 Telecim services 001 Biblio 80.55 Exels Billing Outside 001 biblion 140.75 Outside Outside 001 biblion
	91000 CLIST SVC & NO EXP MISC AA CD	and Charles and Charles and Accord (Medica) Lador Control Lador Control Contro	Later OPER	2022 91000 Labor 240 Registr Payton NJ PA	1,775.00 504.22 607.06 1,775.00 504.22 607.06	240.5 Common Sales and Marke 001 Marke
	91000 CLIST SVC & NO EXP MISC AA CD	SGI - Consent Communications SGI 20112 SIGNO22 Consent Unit Construction (C Q 3VCC search	Contractor 34226 OPER	2021 91000 Non-Labor 020 Profession Part A	8750 4.504.20 2.509.44	1 192.3 Common Galax and Maria (0) 99443 MDC RESEARCH RCF CAT A
	20220 MSC GENERAL EXPENSE AA CD	S64 - Copyonale Communications      S64 20111 09080012 Purchase Invoices (2) 2021 Annual Report     Of 4 0111 0000012 Durhase Invoices (2) 2021 Annual Report	Contractor 19894 OPER	2021 S00200 Non-Labor 000 Professional Services AP 2021 S00200 Non-Labor 000 Professional Services AP	4,285 2,009.41 886.78 26,073 55.209.55 91.489.33	298.81 Annual Report 001 27242 KLUNDT HOSMER DI not CAT A 7.455.56 Annual Report 001 27242 ALUNDT HOSMER DI not CAT A
	SISSO MEC GENERAL EXPENSE AA CO	564 - Concesse Communications 564 20201 0000012 Portname involves 52 2021 Annual Report	Contractor 19923 OPER	202 90000 Nor-Labor 000 Professional Services AP 2021 92000 Nord abor 000 Professional Services AP	1.360 675.59 279.15	12528 Annual Report 001 22242 ALUNDT HOSMER DI not CAT A 0. Under Report 001 19992 ALUNDT HOSMER DI not CAT A
	SENSO OFFICE SUPPLIES & EXPENSES AN CD	664 - Convent Communication 564 2011 0000015 Portama Invision 151 USTATa USPRC48L50     664 - Convent Communication 564 2011 0000015 Durbana Invision 151 USTATa USPRC48L50	Contractor 1000000194019 OPER Contractor 1000000194019 OPER	2021 Repose Revision Conference AP 2021 Repose Revision Service AP 2021 Device Revision Service AP	279.02 265.31 79.44 4.911.00 2.647.67 621.48	35.27 Vendor/Process SupportS 001 110102 NTRADO DIGTAL M not OAT A 1911 01 Vendor/Process SupportS 011 110102 NTRADO DIGTAL M not OAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD	564 - Convent Communications 564 202011 0980015 Purchase Invices 151 UKT and UKT ACC 2     564 - Convent Communications 564 202011 0980015 Durhase Invices 151 UKT and UKT ACC 2	Contractor 100000110821 OPER Optimular 1200496 OPER	2022 92100 Non-Labor 000 Professional Services AP 2020 92100 Non-Labor 000 Professional Services AP	381.17 276.56 79.13	25.5 Vendor/Program SupportS 001 110102 NTRADO DIGITAL ME not CAT A 0. Vendor/Program SupportS 011 111001 OF TTY IMAGES I/S IR CAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD S2100 OFFICE SUPPLIES & EXPENSES AA CD	554 - Concoste Communications 554 20200 00000015 Purchase Invoices 10 Ideal annohoma 554 - Concoste Communications 356 20205 00000015 Purchase Invoices 10 Ideal annohoma and newcom	Contractor 2022-015 OPER Contractor 100000124036 OPER	2022 921000 Non-Labor 000 Professional Services AP 2022 921000 Non-Labor 000 Professional Services AP	300. 212.09 60.68 4.252.25 3.076.82 690.37	27.23 Listerie Droven Ground Opt 2086 CUTAWAY MEDIA RECAT A 295.06 Vender Program SupportS 001 110102 NTRADO DIGITAL M RECAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD S2100 OFFICE SUPPLIES & EXPENSES AA CD	564 - Copyase Communications 564 20205 00600015 Punchase Invoices ED UST-Int - OFFSPCW-OFFSET     564 - Copyase Communications 564 20209 0060015 Punchase Invoices ED SAED TAX	Ensitives Eas 17220170 OPER Contractor 2022-040 OPER	2022 921000 Non-Labor 205 Employee Misc Expenses AP 2022 921000 Non-Labor 000 Professional Services AP	0 0. 0. 27. 19.09 546	O. Vendor/Program SupportS 001 111931 GETTY IMAGES US IN CAT A     245 Vendor/Program SupportS 001 22996 CUT/WWY/MEDIA rot CAT A
	S2100 OFFICE SUPPLIES & EXPENSES AA CD S2100 OFFICE SUPPLIES & EXPENSES AA CD	S64 - Concepte Communications S64 202008 0960015 Purchase Invoices LS Media distribution and neuroom S64 - Concepte Communications (S64 20208) 0960015 Durnhase Invoices LS Media distribution and neuroom	Contractur 100000130783 OPER Contractur 100000130783 OPER	2022 921000 Non-Labor 000 Professional Services AP 2022 921000 Non-Labor 000 Professional Services AP	4.352.1 2.076.72 880.34 382 276.91 79.23	295.04 Vendor/Program Succentri 001 110102 NTRADO DIGITAL M INCIDATA 35.55 Vendor/Droven Genovetti 001 110102 AITDADO DIGITAL M INCIDATA
	92000 ADMINA GENSALARES AA CD 92000 ADMINA GENSALARES AA CD	SISE-consume Communications         SISE         202208         06600300         Labor Cost USD           SISE-consumications         SISE         201712         06600300         Labor Cost USD	Labor OPER Labor OPER	2022 82000 Labor 340 Repuiar Paysol - NJ PA 2021 82000 Labor 340 Repuiar Paysol - NJ PA	8.853.52 6.259 1.790.88 5,301 3,710.67 1,097.07	803.64 Common-Company Comir 005 bibor 480.37 Common-Company Comir 005 bibor
	92000 ADMINA GENSALARES AA CD 92000 ADMINA GENSALARES AA CD	SE4 - Console Communications SE4 20201 0660030 Labor Cont USD SE4 - Console Communications SE4 202110 0660030 Labor Cont USD	Labor OPER Labor OPER	2022 82000 Labor 340 Repuir Panol - NJ PA 2021 82000 Labor 340 Repuir Panol - NJ PA	1.542.11 1.090.9 212.14 8.312.36 5.818.49 1.720.25	140.07 Common-Company Come 005 bibor 772.62 Common-Company Come 005 bibor
	S0000 ADMINE GENSALARIES AA CD S0000 ADMINE GENSALARIES AA CD	Side - Docoste Communicatione Side 20206 0660000 Labor Cost USD Side - Docoste Communicatione Side 20205 06600000 Labor Cost USD	Labor OFER Labor OFER	2022 82000 Labor 340 Repuir Panol - NJ PA 2022 82000 Labor 340 Repuir Panol - NJ PA	5.223 3.692.57 1.056.55 3.995 2.424.49 809.17	474,13 / newword newsame / vervi (0): labor 392,66 / Cammon-Company Comit (0): labor
	S0000 ADMINE GENERATING AN CD	564 - Coposite Communication 564 20205 Colemon Labor Cost USD 564 - Coposite Communication 564 20215 Colemon Labor Cost USD 564 - Coposite Communication 564 20215 Colemon Labor Cost USD	Labor OPER	2022 82000 Labor 340 Hapter Faylor - NJ PA 2021 82000 Labor 340 Recuter Paylor - NJ PA	6,022.4 6,456.16 1,867.3 6,205.44 4,305.00 1,296.03	SB3.13 Common-Company Contr 001 Bibler
	S0000 ADMINE GENERATES AN CD S0000 ADMINE GENERATES AN CD	544 - Colocade Communication 564 20205 (2000) Labor Cont 150 544 - Concouste Communication 564 20205 (2000) Labor Cont 150	Labor OPER	2022 82000 Labor 340 House Panal - NJ PA 2022 82000 Labor 340 Result Panal - NJ PA	9.331 6.596.57 1.687.49	895.55 Control-Contain Cont Of Boar
	SCI00 OFFICE SUPPLIES & EXPENSES AA CD	SG+ Coppose Communication     SG     S2020     S00000     Portugate Invites IC Data AddREGON/078-SPO RMCRRChT MA     S000000     Portugate Invites IC Data AddREGON/078-SPO RMCRRChT MA     Coppose     S000000     Portugate Invites IC Data AddREGON/078-SPO RMCRRChT MA	Vouder 9136439-CC OPER	2022 821000 Non-Labor 890 Office Support 702 PP 2022 821000 Non-Labor 890 Office Support 702 PP	42.41 20.09 8.78	2.94 Common-Company Comit (01 6445 CORP CREDIT CARE NO CAT A
	SECON OFFICE SUPPLIES A SUPPLIES AN CO	Side - Dozonak Communication Side 202008 09000000 Porchase Invides Lid DANA MACREGON ADDRIANTP LID INSCLAT2     Side - Dozonak Communications Park 202000 Documents Invides Lid DANA MACREGON ADDRIANTP LID INSCLAT2	Emaker Ro \$52439-CC OPER	2022 R2100 Non-Labor 225 Employee Misc Expension AP	40.00 25.22 90.11	4.53 Common-Company Comm dot 6445 COORP CREDIT CARE NO CAT A
	S2000 OUTSEE SERVICES EMPLOYED AA CD	664 - Convent Communication 564 20200 0000000 Perturna invites 12 SALES TAX     664 - December Communications 564 2011-2 0000010 Labor Conv 160	Contractor 20007 OPER	2022 R2000 Non-Labor 020 Professional Services AP 2022 R2000 Non-Labor 020 Professional Services AP 2021 Security Set Danier Daniel, NEI Da	740.69 523.60 149.83 5005.66 4.105.66 1.113.9	67.23 Common-Company Come 001 2215 HANNA & ASSOCIATE CAT A 55550 Hanna Company Come 001
	20000 ADMINE GENSALARES AA CD 20000 ADMINE GENSALARES AA CD	564 - console Communications 564 20206 0960031 Laker Cent 150 554 20206 0960031 Laker Cent 150	Labor OPER Labor OPER	2022 82000 Labor 343 Result Panol - NJ PA 2022 82000 Labor 343 Result Panol - NJ PA	8.087.8 5.717.87 1.636. 5.874.28 4.152.82 1.188.25	736.13 Internal Company Commu 401 Internal Company Commu 401 Internal Company Commu 401 Internal Company Commu 401
No.         No.        No.        No.        No.	920000 ACMINA CENSALARES AA CD 920000 ACMINA CENSALARES AA CD	S54 - Concente Communications S56 20206 09660231 Laker Cent USD     S54 - Concente Communications S54 20206 09660231 Laker Cent USD	Labor OPER Labor OPER	2022 820000 Labor 340 Resulter Pavoli - NJ PA 2022 820000 Labor 340 Resulter Pavoli - NJ PA	8.457.65 5.979.14 1.710.81 8.981.07 6.369.17 1.816.09	202.2 Internal Company Communic (00) Babar 81521 Internal Company Communi (00) Babar
No.         No.        No.        No.        No.	920000 ADMINE GEN SALARES AA CD 920000 ADMINE GEN SALARES AA CD	SS4 - Corporate Communications         SS4         202206         08980221         Labor Cost USD           SS4 - Consorte Communications         SS4         202112         09800221         Purchase Invoices LB View design	Labor OPER Contractor 21-522756 OPER	2022 920000 Labor 340 Regular Payrol - NJ PA 2021 920000 Non-Labor 020 Professional Services AP	7,270.39 5,140 1,470.65 900 629.98 186.26	659.54 Internal Company Commu 001 Island Statement Commu 001 Island CREATINE CATCH ST and CAT A
	921000 OFFICE SUPPLIES & EXPENSIES AN CD 908000 INFO AND INSTRUCT ADVERTIS/IP OR GD	SS4 - Consolite Communications      SS4 2020t      Optional Parchase Invoices LD Deel, Renew subscription to Avimoto - tool used to create obstobilides content for Imenal Comms - used decount     SS4 - Consolite Communications      SS4 20206      OblisSD28 Labor Cont USD	t coupon to set better price Voucher E1558601 OPER	2022 921000 Non-Labor 800 Dues AP 2022 909000 Labor 360 Recular Panoli - NJ PA	267 180.42 53.51 342.19	24.19 Internal Company Commu 001 90504 Smith Brandon R Int CATA 342.18 CR Adv for Companyation 001 Internation
No.         No.        No.        No.         No.	908000 INFO AND INSTRUCT ADVERTIS/IP OR GD 908000 INFO AND INSTRUCT ADVERTIS/IP OR GD	S64 - Consoste Communications 568 20112 04665528 Punchase treated (GL ULF Tax - OFFEPDRA CF256T-OFFSTT     S64- Copyrate Communications 558 20111 04665528 Punchase treated (GL ULF Tax - OFFEPDRA CF256T-OFFSTT	Contractor 19608509 OPER Contractor 211916 OPER	2021 808000 Non-Labor 020 Professional Services AP 2021 809000 Non-Labor 020 Professional Services AP	0. 201	OR Adv Siz Conservation 001 111921 GETTY IMAGES US IN CAT A     Size OR Adv Siz Conservation 001 1920 USAMOCATHREN DI CAT A
	MOREOU INFO AND INSTRUCT ADVERT DRP OR GD 900000 INFO AND INSTRUCT ADVERT DRP OR GD	Sole - Companie Communications Sole 200112 Oblig0008 Purchase Involves LD Holdsv 2001 ecands SSI - Companie Communications SSI 200201 Oblig0008 Purchase Involves LD Connections cantomer meetabole Feb 2002	Contractor 211917 OPER Contractor 221921 OPER	2021 w00000 Non-Labor 020 Professional Services AP 2022 900000 Non-Labor 020 Professional Services AP	225	225. DH ARVSC Conservation 001 1800 LISAMCCATHEN DI CATA 113 DR ARVSC Conservation 001 1800 LISAMCCATHEN DI CATA
	NINGO NEO AND NOTIFICE LADIANT DIP OR GD	Approximation Communications     Sol 20200     Obstraction Fiel Connections Readings     Feb 2022     Obstractions Communications     Sol 20220     Obstractions Provide Cont Count counter released     Portiling Provide Control Count Counter Readeding     Obstractions     Sol 20220     Obstractions     Portiling Provide Control Counter Readeding     Obstractions     Sol 20220     Obstractions     Sol 2022     Obstractions     Sol 202     Obstraction     Sol 202     O	Voucher 25025 OPER Contractor INV-0021 OPER Contractor INV-0021 OPER	2022 ISOSCO Non-Labor E15 Printing AP 2022 ISOSCO Non-Labor C02 Printing Services AP 2020 ISOSCO Non-Labor C02 Printesional Services AP	2435 13235	Annas, DR AN ST CONSISTENDING UNIT 10000 MATTANIE (C) O G CATA 132152 OR AN OCCONSISTENDING 001 90012 OLESTILINE OLE OCCURATION 200 OR AN OCCUMENTATION OF 100000 OT 100000 AND 1000000 AND 100000 AND 1000000 AND 100000 AND 100000 AND 1000000 AND 100000 AND 100000 AND 1000000 AND 100000 AND 1000000 AND 1000000 AND 1000000 AND 1000000000 AND 1000000000000000000000000000000000000
	90000 NFO AND INSTRUCT ADVENT DIP OR GD	Concentration Concentration State     Concentration     Section Concentration     SectionConcentration     Section Co	Contractor 221901 OPER Contractor 221911 OPER	2022 909000 Non-Labor 020 Polessional Services AP 2021 909000 Non-Labor 020 Polessional Services AP	113.5 9.500 0.440.00 Viscon	113.5 CR Adv to Conservation 001 1800 LISANCCATHEEN OL CATA 905.12 OR Adv to Conservation 001 1800 LISANCCATHEEN OL CATA
	SISSO MSC GENERAL DIPENSE AA CD SISSO MSC GENERAL DIPENSE AA CD	SS4 - Consorte Communications SS4 20220 0985330 Durchasa invince 1/2 Condit Media Culturer Outwach and Education     SS4 - Consorte Communications SS4 20220 0985330 Pupping National Invince 1/2 Condit Media Culturer Outwach and Education	Contractor 1347 OPER Operation 1347 OPER	2022 900000 Non-Labor 020 Professional Services AP 2022 900000 Non-Labor 020 Professional Services AP	1500 1.000.40 203.42 1500 1.000.43 203.42	136.15 Contourner Education Gene 001 136152 MRG ELLIS CATA 136.15 Contourner Education Gene 001 136152 MRG ELLIS CATA
No.         No.        No.        No.         No.	SUDDO MEC GENERAL DIPENSE AA CD SUDDO MEC GENERAL DIPENSE AA CD	S54 - Corporate Communications S54 202205 09955330 Purchase Invoices LIS Social media customer unersch in deutation     S54 - Constrain Communications S56 202205 09955330 Purchase Nurview I/C Nauk AMACGONALE/CEX SOCIAP1009	Contractor 5415 OPER Contractor 5415 OPER Contractor 6038456.00 APER	2022 920200 Nan-Labor 020 Professional Services AP 2022 920200 Nan-Labor 010 Professional Services AP	1,500 1,000,40 20142 25 04.78 1,002	136.15 Customer Education Gene 001 154192 Medic ELLIS CAT A 3.18 Customer Education Gene 001 EALIS CONDUCTOR CONT AND A
	90000 MSC GENERAL EXPENSE AA CD 90000 MSC GENERAL EXPENSE AA CD	S54 - Consolute Communications IS54 20205 09805370 Microlaneous Tomas S2/09 RCCH in M0044084029 109 RCCH     S54 - Consolute Communications IS58 20207 09805370 Divertises Involves IPE Social media customer outwach and education.	Voluzher OPER Contractor 1445 OPER	2022 800000 Ner-Labor 915 Pretino PA 2022 900000 Ner-Labor 000 Professional Services #P	236.8 520.8 148.04 1.500 1.000.43 510.45	06.88 Customer Education Gene 001 Customer Education Gene
No.         No.        No.        No.        No.	90000 MSC GENERAL EXPENSE AN CD 90000 MSC GENERAL EXPENSE AN CD	S54 - Couporate Communications      S64      20208      06660330      Inventor VLSD     Identity liseas     Void      Void     Void     Void     Void	Material OPER Voucher 9889439-CC OPER	2022 800000 Non-Labor 415 Material Issues N 2022 800000 Non-Labor 810 Advertising Dipenses AP	22.44 22.00 6.56 18.45 13.06 3.73	2.55 Customer Education Gene 001 CAT A 1.68 Customer Education Gene 001 6645 CORP CREDIT CARC not CAT A
	90000 MSC GENERAL EXPENSE AN CD 921000 OFFICE SUPPLIES & EXPENSES AN CD	SS4 - Consolite Communications SS4 20229 0985537 Punchase Inscises LD DNN-ADERION-FACERX 4/PDGFX/12 SS4 - Consolite Communications SS4 202111 09865107 Labor Cont USD	Voucher 9889439-CC OPER Labor OPER	2022 800000 Non-Labor 819 Advertising Expenses AP 2021 821600 Labor 349 Reputer Partel - NJ PA	75. 53.02 15 71.26 49.88 54.75	6.81 Customer Education Services 001 6445 CORP OREDIT CARE and CAT A 6.63 Telecom Services 001 abor
	S21000 OFFICE SUPPLIES & EXPENSES AN CD S21000 OFFICE SUPPLIES & EXPENSES AN CD	SS4 - Consonate Communications SS4 20206 09805107 Labor Cost USD     SS4 - Consonate Communications SS4 20205 09805107 Labor Cost USD	Labor OPER Labor OPER	2022 921600 Labor 340 Resular Partsl - NJ PA 2022 921600 Labor 340 Resular Partsl - NJ PA	71.26 50.38 54.41 71.28 50.38 54.41	6.47 Telecom Services 001 Isbor 6.47 Telecom Services 001 Isbor
	Scrool OFFICE SUPPLIES & EXPENSES AA CD Scrool OFFICE SUPPLIES & EXPENSES AA CD	1544-00000840-000000000000000000000000000	Labor OPER Labor OPER	2022 K2100 Labor 340 Repuiar Paynol - NJ PA 2022 K2100 Labor 340 Resular Paynol - NJ PA	71.26 50.38 54.41 77.26 50.38 54.41	6.47 Telecon Senices 001 labor 6.42 Telecon Senices 001 labor
	Scional Office Supplies assesses AA CD Scional Office Supplies Assesses AA CD	ser Lenser Commission 364 2020 (1985)107 Later Cont 350 554 - Commission 554 20208 (1985)107 Later Cont 350 559 - Commission 554 20208 (1985)107 Later Cont 350	Labor OPER Labor OPER	2022 INCTINCO Labor 340 Recular Partill - NJ PA 2022 INCTINCO Labor 340 Recular Partill - NJ PA	71.28 50.38 54.41 71.26 50.38 54.41	ANY LERCER Services 001 Moor Address 001
	ADMINE GENORAPHIS AM CD 020000 ADMINE GENERALARIS AM CD 020000 CONTROL AND C	Inter Consideration State 2020 0980108 Labor ContUSD SSI- Company Communications SSI 20207 09801088 Labor ContUSD 2020 09801088 Labor ContUSD	Labor OPER Labor OPER	2022 INTERPORT Labor 240 Recular Parcel - NJ PA 2022 INTERPORT Labor 240 Recular Parcel - NJ PA 2020 INTERPORT - NJ PA	100.25 92.08 26.35 381.5 206.7 77.17	34.00 Exela Billing Cutage 001 Biblion 34.00 Exela Biblion Cutage 001 Biblion
	910000 CLEATING & NEO LAR-MELC AM CD 910000 CLEATING & NEO LAR-MELC AM CD 910000 CLEATING & NEO LAR-MELC AM CD	sare" - Sundanne - Jereman - Jereman - Jane - 202203 0960730 Labor Cold (1b2) SSH - Consume Communications SSH 202204 0960730 Labor Cost (ISD) SSH - Onesanda - Communications (ISS 2003) 0960730 Labor Cost (ISD)	Lator OPER Lator OPER	2022 910000 Labor 340 Recurr Marcin - NJ PA 2022 910000 Labor 340 Recuir Panol - NJ PA 9029 940000 Labor 540 Recuir Panol - NJ PA	822.0 2247.50 15022.00 8240.20 4.200.13 2.822.19 4.400.00 0.014.00	res. rs. issuemed Salles and Barke Ott. Index 1.118.66 Common Sales and Marke Ott. Index 60.62 Common Sales and Marke Ott.
	91000 CLETEVCA NO DUP-MEC AA CD 91000 CLETEVCA NO DIP-MEC AA CD 91000 CLETEVCA NO DIP-MEC AA CD	and - Consistent Communications     Soft 20208     Operating     Soft - Consistent Communications     Soft     Operating     Soft     Operating     Operating     Soft     Operating     Operatin	Labor OPER Labor OPER Committee 15548 OPER	2022     1910000     Labor     203 Reputer Panoli - NJ     PA     2022     910000     Labor     2040 Reputer Panoli - NJ     PA     2024     91000     Non-allow     2010 Difference     40	4.802.82 2.531.23 1.662.62 5.709.2 2.677.60 1.566.02 8.500 4.473.00 0.000	somery ( remote tasks and terrer (p)
	91000 CLET SVC & NO DEP 48C AA CD	constraints constraints and part of present of presentation (constraints (constraints constraints))     SS4 - Constraints Constraints (constraints)     SS4 - Constraints (constraints)     SS4 - Constraints (constraints)     SS4 - Constraints)     SS4 - Constraints     SS4 - Constr	Constitution 15068 UM-R Construction 3468 OPER	2022 910000 Non-Labor 020 Protestonal Services AP 2022 910000 Non-Labor 020 Protestional Services AP	6,623.88 2,906.03 20,000 10,869.28 7,126.29	2.024.43 Common Sales and Barke Ont 170080 WP4058U16-LEC CAT A 2.024.43 Common Sales and Barke Ont 99643 MDC RCSEARCH R0C CAT A 205 Charter Extraction Call (201)
No.         No.        No.         No.         No.	920000 ADMINA GENSALARIES AA CD 920000 ADMINA GENSALARIES AA CD	SS4 - Consonate Communications SS4 202205 09907055 Labor Cost USD SS4 - Consonate Communications SS4 202208 09907055 Labor Cost USD	Labor OPER	2022 920000 Labor 540 Recular Panel - NJ PA 2022 920000 Labor 540 Recular Panel - NJ PA	724 511.56 146.37 510.62 541.99 446.37	45.69 Workslace 2022 001 bbor 45.28 Workslace 2022 001
No.         No.        No.         No.         No.	20200 MIC GENERAL EXPENSE AA CD	564 - Corporate Communications     568 20205 00660012 Petitianas Inscisula US 2021 Annual Report     564 - Corporate Communications     568 20209 006600015 Petitianas Inscisula US 1021 Annual Report     575 Petitianas Inscisula US 1021 Annual Report	Contractor 19124 OPER Contractor 190000134200 (PED	2022 82000 Non-Labor 000 Professional Services AP 2022 821000 Non-Labor 000 Professional Services AP	89,465.2 63,987.42 19,097.02 0. 0. 0. 0	0,120.76 Annual Report 001 27242 HLIMDT HOSMER DI RECATA 0. Vender/Program SupportS 001 110702 NITRAPO DIGTIL ME WY CATA
No.         No.        No.         No.         No.	S21000 OFFICE SUPPLIES & EXPENSION AM CD S21000 OFFICE SUPPLIES & EXPENSION AM CD	SS4 - Companie Communications SS4 20112 0980015 Purchase Involves LLS Stock Index for who content and customer newsletters SS4 - Companie Communications SS4 20112 0980015 Elucrotexam Services LLS Index (LLS Stock Index for Vendor Comment and customer newsletters	Emolowe Eas 1376845 OPER Emolowe Eas 1376845 OPER	2021 921000 Non-Labor 205 Employee Micro Loomaa AP 2021 921000 Non-Labor 205 Employee Micro Loomaa AP	70 48 5448	6.51 Vendor/Process Success 001 111921 GETTY IMGES US & GATA 0.59 Vendor/Process Success 001 111921 GETTY IMGES US & GATA
No.         No. <td>821000 OFFICE SUPPLIES &amp; EXPENSES AA CD 821000 OFFICE SUPPLIES &amp; EXPENSES AA CD</td> <td>564 - Concente Communications 564 20200 00660015 Perchane Invictor US Stock Transee     564 - Opported Communications 564 20200 006600015 Perchane Invictor US Stock Transee</td> <td>Ensitives Eau 19829867 OPER Contractor 19829396 OPER</td> <td>2022 821000 Non-Labor 235 Employee Misc Extension 2022 821000 Non-Labor 000 Professional Services AP</td> <td>20. 40.49 54.16 0. 0. 0.</td> <td>6.35 Vendor/Prozram SupportS 001 111921 GETTY IMAGES US N CAT A 0. Vendor/Prozram SupportS 001 111921 GETTY IMAGES US N CAT A</td>	821000 OFFICE SUPPLIES & EXPENSES AA CD 821000 OFFICE SUPPLIES & EXPENSES AA CD	564 - Concente Communications 564 20200 00660015 Perchane Invictor US Stock Transee     564 - Opported Communications 564 20200 006600015 Perchane Invictor US Stock Transee	Ensitives Eau 19829867 OPER Contractor 19829396 OPER	2022 821000 Non-Labor 235 Employee Misc Extension 2022 821000 Non-Labor 000 Professional Services AP	20. 40.49 54.16 0. 0. 0.	6.35 Vendor/Prozram SupportS 001 111921 GETTY IMAGES US N CAT A 0. Vendor/Prozram SupportS 001 111921 GETTY IMAGES US N CAT A
No.         No. <td>SC1000 OFFICE SUPPLIES &amp; EXPENSIES AN CD SC1000 OFFICE SUPPLIES &amp; EXPENSIES AN CD</td> <td>S54 - Consorte Communications IS54 20200 00900015 Purchase Invoices LD Stock Images for web, measinteens     S54 - Consortee Communications IS54 202025 00900015 Purchase Invoices LD SALS3 TXX</td> <td>Contractor 17024196 OPER Contractor 2022-002 OPER</td> <td>2022 921000 Non-Labor 020 Professional Services AP 2022 921000 Non-Labor 020 Professional Services AP</td> <td>70 49.49 54.18 27. 19.09 546</td> <td>6.35 Vendor/Prooram Supports 001 111821 GETTY IMAGES US B CAT A 2.45 Vendor/Prooram Supports 001 22886 CUT/W/W/MEDIA not CAT A</td>	SC1000 OFFICE SUPPLIES & EXPENSIES AN CD SC1000 OFFICE SUPPLIES & EXPENSIES AN CD	S54 - Consorte Communications IS54 20200 00900015 Purchase Invoices LD Stock Images for web, measinteens     S54 - Consortee Communications IS54 202025 00900015 Purchase Invoices LD SALS3 TXX	Contractor 17024196 OPER Contractor 2022-002 OPER	2022 921000 Non-Labor 020 Professional Services AP 2022 921000 Non-Labor 020 Professional Services AP	70 49.49 54.18 27. 19.09 546	6.35 Vendor/Prooram Supports 001 111821 GETTY IMAGES US B CAT A 2.45 Vendor/Prooram Supports 001 22886 CUT/W/W/MEDIA not CAT A
No.         No.        No.         No.         No.	921000 OFFICE SUPPLIES & EXPENSIES AM CD 921000 OFFICE SUPPLIES & EXPENSIES AM CD	S54 - Consolide Communications      S54 20205 00900015 Durinina Involves I/G Istella monitor/I/G Istella monitor/I/G     S54 - Consolide Communications      S54 20205 00900015 Putchase Involves I/G IDAN AND/REVIEW	Contractor 2022-002 OPER Voucher 9279439-CC OPER	2022 821000 Non-Labor 020 Professional Services AP 2022 821000 Non-Labor 935 Subscriptions AP	300 212.09 60.68 10 7.06 2.02	27.23 Usedwichowan Growert 001 22088 CUTAVAY/MEDA R0 CAT A 0.91 Vendor/Program Supports 001 6445 CORP CREDIT CARE not CAT A
No.       N	921000 OFFICE SUPPLIES & EXPENSES AA CD 921000 OFFICE SUPPLIES & EXPENSES AA CD	564 - Cupprate Communications         568         20205         (Petrichase hexical GL) GL*Ta:-OFFSPEK-CFSET-OFFSET           564 - Cupprate Communications         568         20206         06660015         Purchase hexical LG (LeFTa:-OFFSPEK-CFSET-OFFSET	Contractor 100000124236 OPER Contractor 1000001241138 OPER	2022 821000 Non-Labor 0.00 Professional Services AP 2022 821000 Non-Labor 0.00 Professional Services AP	0. 0. 0.	Under/Prozen Succents 001 110102 NTRADO DIGITAL ME not CAT A     Under/Prozen Succents 001 110102 NTRADO DIGITAL ME not CAT A
No.         No. <td>SC1002 OFFICE SUPPLIES &amp; EXPENSES AN CD SC1002 OFFICE SUPPLIES &amp; EXPENSES AN CD</td> <td>tord - Cotocolae Communications 559 (20229) 09900015 Purchase Invoices LB Media monitorina 554 - Concentral Communications 558 (20208) 09800015 Devinans Invoices I/C Media monitorina</td> <td>Contraction 2022-040 OPER Veacher 2022-034 OPER</td> <td>2022 921000 Non-Labor 020 Professional Services AP 2022 921000 Non-Labor 935 Subscriptions AP</td> <td>200 212.09 90.68 200 212.09 90.68</td> <td>27.22 Vendor/Prooram Success 001 22686 CUTAWAY MEDIA not CAT A 27.22 Vendor/Drovem Grocess 001 22686 CUTAWAY MEDIA not CAT A</td>	SC1002 OFFICE SUPPLIES & EXPENSES AN CD SC1002 OFFICE SUPPLIES & EXPENSES AN CD	tord - Cotocolae Communications 559 (20229) 09900015 Purchase Invoices LB Media monitorina 554 - Concentral Communications 558 (20208) 09800015 Devinans Invoices I/C Media monitorina	Contraction 2022-040 OPER Veacher 2022-034 OPER	2022 921000 Non-Labor 020 Professional Services AP 2022 921000 Non-Labor 935 Subscriptions AP	200 212.09 90.68 200 212.09 90.68	27.22 Vendor/Prooram Success 001 22686 CUTAWAY MEDIA not CAT A 27.22 Vendor/Drovem Grocess 001 22686 CUTAWAY MEDIA not CAT A
No.         No. <td>SCI000 OFFICE SUPPLIES &amp; EXPENSES AA CD SCI000 ADMINA GENISALARIES AA CD</td> <td>tode - consumications 554 20206 09600162 Labor Cost USD 554 - Copyrate Communications 554 20205 0960030 Labor Cost USD</td> <td>Labor OPER Labor OPER</td> <td>2022 921000 Labor 205 IncentiveRona Pay PA 2022 920000 Labor 240 Regular Payoli - NJ PA</td> <td>1.500 1.060.40 203.42 2.605 1.041.6 526.54</td> <td>128.15 Admin Activities-Common (00) Isbor 228.46 Common-Company Come (00) Isbor</td>	SCI000 OFFICE SUPPLIES & EXPENSES AA CD SCI000 ADMINA GENISALARIES AA CD	tode - consumications 554 20206 09600162 Labor Cost USD 554 - Copyrate Communications 554 20205 0960030 Labor Cost USD	Labor OPER Labor OPER	2022 921000 Labor 205 IncentiveRona Pay PA 2022 920000 Labor 240 Regular Payoli - NJ PA	1.500 1.060.40 203.42 2.605 1.041.6 526.54	128.15 Admin Activities-Common (00) Isbor 228.46 Common-Company Come (00) Isbor
No.         No. <td>SCIENCE ADMINE GENERALARIES AA CD SCIENCE ADMINE GENERALARIES AA CD</td> <td>Inder - Companie Communications Sole 20208 0980030 Labor Cont USD SSI- Companie Communications SSI 20208 0980030 Labor Cont USD 2010 - Control Communications CSI 20208 0980030 Labor Cont USD</td> <td>Labor OPER Labor OPER</td> <td>2022 In20000 Labor 340 Recular Parcel - NJ PA 2022 Sc2000 Labor 340 Recular Parcel - NJ PA 2020 Recular Parcel - NJ PA</td> <td>8.512.53 4.604.00 1.317.56 5.215 3.663.2 1.653.68</td> <td>Set 14 Common-Company Comr 001 Maker 47240 Common-Company Comr 001 Maker</td>	SCIENCE ADMINE GENERALARIES AA CD SCIENCE ADMINE GENERALARIES AA CD	Inder - Companie Communications Sole 20208 0980030 Labor Cont USD SSI- Companie Communications SSI 20208 0980030 Labor Cont USD 2010 - Control Communications CSI 20208 0980030 Labor Cont USD	Labor OPER Labor OPER	2022 In20000 Labor 340 Recular Parcel - NJ PA 2022 Sc2000 Labor 340 Recular Parcel - NJ PA 2020 Recular Parcel - NJ PA	8.512.53 4.604.00 1.317.56 5.215 3.663.2 1.653.68	Set 14 Common-Company Comr 001 Maker 47240 Common-Company Comr 001 Maker
	SCODO ADMINA GENSALARIES AA CD SCODO ADMINA GENSALARIES AA CD	tode - consume communications 554 (2022) 0000000 Lakor Cont USD 554 - Consume Communications 554 (2022) 0000000 Lakor Cont USD 559 - Consume Communications 554 (2022) 000000 Lakor Cont USD (2020)	Labor OPER Labor OPER	2022 920000 Labor 360 Recular Panoli - NJ PA 2022 920000 Labor 360 Recular Panoli - NJ PA 2000 Panoli - NJ PA	7,020.54 4.592.36 1.422.74 3,659.39 2.562.19 733.12	SUB.64 Common-Company Comt (00) Isbor 20166 Common-Company Comt (00) Isbor
No.         Control         Co		Aur - Longour - Longour - Longour - Lango Cont USD Labor Cont USD - SS-4 - Constant Communications SS-8 20209 0990030 Labor Cont USD - 59.4 - Constant - Cont USD - 59.5 - Cont USD	Labor OPER Labor OPER	2022 INDOD Labor S40 Regular Payoli - NJ PA 2022 IS2000 Labor 205 IncentiveRonas Pay PA	8,728 6,877.92 1,967.97 400, 282.78 80.91	HEAT COMMON-COMBANY COM UNIT
	92000 ADMINE GEN SALARES AA CD	All American Commenciation and 200112 DMARCED Labor Cost Call C	Lator OPER	2022 80000 Labor 3H0 Hebuter Parkst - NJ PA 2022 80000 Labor 3H0 Resulter Parkst - NJ PA	2411.00 1.00.11 59378 3.29373 2.276.99 66129	2022 Common Common Comm (0): Bbor 2022 Common Common Comm (0): Bbor
ONE         OPE         OPE <td>900000         ADMINA GENSALARES         AA         CD           900000         ADMINA GENSALARES         AA         CD</td> <td>Star Constant Communications Data 2000 000000 Labor Constant</td> <td></td> <td></td> <td></td> <td></td>	900000         ADMINA GENSALARES         AA         CD	Star Constant Communications Data 2000 000000 Labor Constant				
	92000         ACMINA GENSAVARES         AA         CD	244 - Concession Communications S54 202001 0000030 Lake Concession     254 - Concession Communications S54 202001 0000030 Laker Concession     254 - Concession Communications S56 202001 0000030 Laker Concession     254 - Concession Communications S56 202001 0000030 Laker Concession	Labor OPER Labor OPER	2022 900000 Labor 340 Repair Panti NJ PA 2022 920000 Labor 340 Repair Panti NJ PA 2022 920000 Labor 540 Repair Panti NJ PA	5,00.5 3,00.78 1,118.7 5,00.5 3,000.78 1,118.7	502.02 Common-Contrastry Contra 001 Bibler 502.01 Common-Contrastry Contra 001
	800000         ARAINA GENTSALARIES         AA         CD	941-convectormonizations         564         20207         6968030         Lado Canido           941-convectormonizations         564         20207         6968030         Lado Canido           942-convectormonizations         564         20208         6968030         Lado Canido           944-convectormonizations         564         20208         6968030         Lado Canido           944-convectormonizations         564         20208         6968030         Lado Canido           944-convectormonizations         564         20208         6968030         Lador Canido	Labor OFER Labor OFER Labor OFER Labor OFER Labor OFER	2022         B00000         LB00         940 Habull FARIE NJ.         PA           2023         B00000         LB00         940 Habull FARIE NJ.         PA           2024         B00000         LB00         940 Habull FARIE NJ.         PA           2022         B00000         LB00         940 Habull FARIE NJ.         PA           2022         B00000         LB00         940 Habull FARIE NJ.         PA           2022         B00000         LB00         940 Habull FARIE NJ.         PA	5.00.5 3.009.78 1.118.7 5.00.5 3.009.78 1.118.7 6.000 4.005.53 1.225 7.091.5 0.004.68	522.02 Camero-Camaro Carrel (61 billion 522.01 Camero-Camaro Carrel (61 billion 588.01 Camero-Camaro Carrel (61 billion 588.01 Camero-Camaro Carrel (62 billion 689.02 Camero-Camaro Carrel (62 billion
	Status         Active La Christeris         M.         CD           Status         Christeris         M.         CD      Status         Chri		Labor         06/5R           Labor         06/5R	2020         B00000         Labor         Sel Hall (Hold)         Heil           2020         B00000         Labor         Heil (Hold)         Heil (Hold)           2020         B00000         Labor         Heil (Hold)         Heil (Hold)           2020         B00000         Labor         Heil (Hold)         Heil (Hold)	5,500.5         3,000.78         1,118.7           5,500.5         3,000.78         1,118.7           6,000.6         3,000.78         1,108.7           7,001.5         5,000.8         1,205.6           3,001.6         2,000.75         1,205.6           3,001.8         2,200.75         2,864.7	202.02 Common Comman Comt (00     202.02     202.0

ADMINA GENISALARIES AA ADMINA GENISALARIES AA	2D 554 - Corporate Communications 556 202207 096 2D 554 - Corporate Communications 556 202112 066	00 Labor Cost USD 00 Labor Cos	Labor OPER Labor OPER	2022 920000 Labor 240 Result Panol - NJ PA 2021 620000 Labor 240 Repuit Payol - NJ PA	8.675.78 6.123.35 5,939.71 4,157.68	1754.94 787.49 Common-Company Comt 001 1229.22 552.81 Common-Company Comt 001		CORP OSEDIT CARE IN Smith Standard R. HINNA & ASSOCIATE O HINNA & ASSOCIATE O CORP OSEDIT CARE IN MELLETICKAINC IN CORP OSEDIT CARE IN CORP OSEDIT CARE IN CORP OSEDIT CARE IN CORP OSEDIT CARE IN
	3D         S54 - Consorate Communications         S54         202207         098           3D         S54 - Consorate Communications         S54         202110         098		Labor OPER Contractor 8540439-CC OPER	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			6445	CORP CREDIT CARE
MSC GENERAL EXPENSE AA OUTSIDE SERVICES EMPLOYED AA	3D         S54 - Consorate Communications         S54         202112         084           3D         S54 - Consorate Communications         S54         202203         084	Manufaceura Tennes Debbis Deubel concerns store order     Parchase Invices LD, Micc Enniezem recort for Samh Ricclandelli	Constant: IMAMBACC OPER Constant: CARACTORY OPER Encloses Soc Statistical Constantes Statistical Constantes Statistical Constantes Statistical Constante Statistical Constatisti	2021 80000 Non-Labor 000 Professional Services PA 2022 82000 Non-Labor 225 Employee Mile; Expenses AP	-72 -50.4 120 94.80	-16.9 -6.7 Common-Comman Comm 001 26.27 10.9 Common-Comman Comm 001	90524 2015 6445 98241 198241 198241 198277 6445 6445	Smith, Brandon R P
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	SD         SS4 - Corporate Communications         SS4         202206         098           3D         SS4 - Corporate Communications         SS4         202206         098	00 Purchase Invoices US SALES TAX 00 Purchase Invoices US Healting season brochure reprint for energy kit	Contractor 28963 OPER Contractor 28962 OPER	2022 930200 Non-Labor 020 Professional Services AP 2022 930200 Non-Labor 020 Professional Services AP	42.76 30.23 1.157.5 \$18.29	845 3.88 Common-Company Comit 001 234.14 105.07 Common-Company Comit 001	2015	HANNA & ASSOCIATE C
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	SD         SS4 - Consorte Communications         SS4         202207         084           SD         SS4 - Consorte Communications         SS4         202208         084	O     Perchane Inscises LS DANA AND/RISCH ST. AZTECA - VALLEY     Devolves inscises US Mecellaneous We are Aviata arist terms	Emalove Eia 9947439-CC OPER Contractor 7325 OPER	2022 930200 Non-Labor 215 Employee Business Mask AP 2022 930200 Non-Labor 020 Professional Services AP	90.21 60.77 3.162.5 2.205.73	1925 8.19 Common-Company Comm 001 629.71 297.06 Common-Company Comm 001	6445 98241	HELVETICKAINC /
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	2D S54 - Corporate Communications S54 202209 094 2D S54 - Corporate Communications S54 202209 094	00 Punchase Invoices LS Media talehoa 00 Punchase Invoices LS DANA ANDERSON PINERA BREAD MOTION O	Contractor 3601 OPER Emotover Exo 9889439-CC OPER	2022 930200 Non-Labor 020 Professional Services AP 2022 930200 Non-Labor 215 Employee Business Mask AP	20.600 21.602.67 397.04 280.89	6.199.77 2.777.56 Common-Company Come 001 90.31 36.04 Common-Company Come 001	104277 6445	MEDIA WORKS RESI III OORP CREDIT CARE /
MSC GENERAL EXPENSE AA OFFICE SUPPLIES & EXPENSES AA	2D S54 - Corocrate Communications S54 202209 094 2D S54 - Corocrate Communications S54 202209 094	00 Purchase Invoices LS DANA ANDERSCH-JMMY JOHNS - 1418 - MOTO 00 Purchase Invoices LS DANA ANDERSCH-GTAPLES 00102354	Emoloyee Exo 9889439-CC OPER Voucher 9889439-CC OPER	2022 930200 Non-Labor 215 Employee Business Mask AP 2022 92100 Non-Labor 890 Office Suzzlies AP	22.03 15.57 22.95 23.29	6.46 2. Common-Company Come 001 6.67 2.99 Common-Company Come 001	6445 6445	CORP CREDIT CARE IN CORP CREDIT CARE /
ADMINIL GENISALARES AA ADMINIL GENISALARES AA	2D S54 - Consorate Communications S54 202110 064 2D S54 - Consorate Communications S54 202112 064	01 Labor Cost USD 01 Labor Cost USD	Labor OPER	2021 820000 Labor 340 Resulter Paintel - NJ PA 2021 820000 Labor 340 Resulter Paintel - NJ PA	6.001.70 4.003.11 4.220.30 3.024.19	1420.04 638.63 Internal Company Commun. 001 894.1 402.1 Internal Company Commu 007		W
ADAINA GENSALARES AA	2D S54 - Corporate Communications S54 202207 094	Df Labor Cost USD	Labor OPER	2022 820000 Labor 340 Regular Payrol - NJ PA 2022 800000 Labor 340 Regular Payrol - NJ PA	4,228.8 2,989.55 2,997.7	855.4 383.84 Internal Company Commu 001 801.94 199.86 Internal Company Commu 00		
ADMINA GENISALARES AA	D S54 - Coporate Communications S58 202205 089	D1 Labor ContUSD	Labor OPER	2022 820000 Labor 360 Repuir Partol - NJ PA	8.553.4 6.046.92	1720.18 778.4 Internal Company Commu 005		-
ADMINE GENSALARES AA	JD         SSH - Consolide Communications         SSH         202207         OW           3D         SSH - Consolide Communications         SSH         202208         OW           3D         SSH - Consolide Communications         SSH         202208         OW	01 Eacross Incise LS Vee design 01 Purchase Incise LS Vee design 02 Purchase Incise LS Vee design 03 Purchase Incise LS Vee design 04 Purchase Incise LS Vee design 05 Purchase Incise Incise LS Vee design 05 Purchase Incise LS Vee d	Laker OPER Contractor 22-0510 OPER Contractor 22-0511 OPER Contractor 28001 OPER Ensitives Exa (1980/29-CC OPER	2022 82000 Labor 340 Hebuilt Parker NJ PA 2022 82000 Nbn-Labor 020 Professional Services AP	7/08/34 4.588.42 900 606-26	182.05 B1.09 Internal Company Commun 001	100754	CREATINE CATCH ST P
OUTSEE SERVICES EMPLOYED A	2D SS4 - Corporate Communications SS4 202209 09	Parchase Inscise Lis ArkEn Tax     Parchase Inscise Lis ArkEn Tax	Contractor 29801 OPER Contractor 29801 OPER	2022 RECOOL NET-Labor COOP released as rules AP 2022 RE2000 Non-Labor COO Professional Services AP	10 7.15	2.05 1 Internal Company Commu 007	2015	HANNA & ASSOCIATE P
MIC GENERAL DIPENSE AN	2D SS4 - Corporate Communications SS4 202112 08	Si Labor Cost USD     Si Labor Cost USD	Long         Market         OPE           Lang         Sec.         OPE           Lang         OPE         OPE	2021 B30200 Labor 240 Require Panel - NJ PA	1274.00 2.291.79	677.57 204.72 Prevents C/D Daviserie 00 077.57 304.72 Communic C/D Daviserie 00		
MSC GENERAL EXPENSE AA	20 S54 - Consultational S54 202110 04 20 S54 - Corporate Communications S54 202110 044	IS Later Contract IS Later Contract	Labor OPER	2022 NEDADO LADO 340 HALLIN FAMILI - MJ PA 2021 800200 Labor 205 Incentive/Bonus Pay PA	4,500 4,549.87	1,345.18 604.96 Corporate ECP Pandemic 001		
INSC GENERAL DIPENSE AA INFO AND INSTRUCT ADVERT DIP OR	D SS4 - Consorate Communications SS8 202112 066 2D SS4 - Consorate Communications SS8 202203 068	25 Labor Cost USD 28 Labor Cost USD	Labor OPER Labor OPER	2021 800200 Labor 340 Resulter Perroll - NJ PA 2022 809000 Labor 340 Resulter Perroll - NJ PA	412.40 200.73 700.12	85.36 38.39 Corporate EOP Pandemic 001 703.12 OR Adv for Conservation 001		
INFO AND INSTRUCT ADVERTIDIP OR INFO AND INSTRUCT ADVERTIDIP OR	2D SS4 - Consorate Communications SS8 202208 068 2D SS4 - Consorate Communications SS8 202208 068	28 Labor Cost USD 28 Labor Cost USD	Labor OPER Labor OPER	2022 809000 Labor 340 Resulter Partol - NJ PA 2022 809000 Labor 340 Resulter Partol - NJ PA	1065	1.065.12 OR Adv for Conservation 001 488.18 OR Adv for Conservation 007		
INFO AND INSTRUCT ADVERTIDIP OR INFO AND INSTRUCT ADVERTIDIP OR	2D S54 - Corporate Communications S54 202209 068 2D S54 - Corporate Communications S54 202111 068	28 Purchase Invoices LS OR Connections NL 28 Purchase Invoices LS Connections customer newsletter Nov 2021	Contractor 77981 OPER Contractor 211909 OPER	2022 909000 Non-Labor 020 Professional Services AP 2021 909000 Non-Labor 020 Professional Services AP	10,472.	10,6/2. OR Adv tor Conservation 001 113. OR Adv tor Conservation 007	0000 1000 2015 6000 1000 101652 101652 101652 101652 101652 101652	LISAMOCATHREN DI (
INFO AND INSTRUCT ADVERTIBLY OR INFO AND INSTRUCT ADVERTIBLY OR	2D S54 - Consorate Communications S54 202206 068 2D S54 - Consorate Communications S54 202208 068	28 Purchase Invoices US OR CAT A crist production 29 Dischase Invoices 16 US-Tag- USPOK-SALES	Contractor 29449 OPER Contractor 77572 OPER	2022 809000 Non-Labor 020 Professional Services AP 2022 809000 Non-Labor 020 Professional Services AP	218.25	215.25 OR Adv for Conservation 001 215.15 OR Adv for Conservation 007	2015	HANNA & ASSOCIATE O
NFO AND INSTRUCT ADVERTID/P OR INFO AND INSTRUCT ADVERTID/P OR	20 S54 - Consorate Communications S54 202209 068 20 S54 - Consorate Communications S54 202208 068	Alexandre Inscises LS Rates customer relice printing     Purchase Inscises LS Residential Neurointer	Voucher 78021 OPER Contractor 221963 OPER	2022 809000 Non-Labor 915 Printing AP 2022 809000 Non-Labor 020 Professional Services AP	1210	1.210. OR Adv for Conservation 001 105. OR Adv for Conservation 007	1802	NATIONAL COLOR G IN LISA MOCATHREN DI (
MSC GENERAL EXPENSE AA	2D S54 - Concrete Communications S56 202111 066	Macellaneoux Transac Surgio RICCH inv M00404598021 108-RICCH     Dechara Inviore 16 Social Media Custome Education and Information	Voucher OPER	2021 800000 Non-Labor 915 Printing PA	360.86 252.61 9.500 2.440.00	74.68 23.59 Customer Education Gene 005 736.93 295.74 Customer Education Gene 00	114050	SERVICIANE NEWS
MSC GENERAL EXPENSE AA	2D S54 - Consorate Communications S54 202111 094	Dischass Invites IV Social Media Customer Outreach and Education	VelaDer OFSR Contractor 1210755 OFER Contractor 1221 OFER Nacional 1221 OFER	2021 \$30200 Non-Labor 020 Professional Services AP	1.500 1.649.97	210.43 128.6 Customer Education Game 005	104162	MRGE ELLIS
MSC GENERAL EXPENSE AA	2D S54 - Corporate Communications S54 202203 094	Biologian main maine a construction model in the construction     Purchase involves LE Social Media Customer Outreach and Education	Voucher OPER Contractur 1382 OPER	2022 B30200 Non-Labor 020 Professional Services AP	1,500 1,000.43	203.42 136.15 Customer Education Gene 007	104162	MIKE ELLIS
MSC GENERAL EXPENSE AA	20 SS4 - Constraint Communications SS4 20200 044 20 SS4 - Constraint Communications SS4 202206 044	International International Surger Hell Clief and Medical State Clief     Purchase Involves LIS Social media customer outreach and education.	Contractor 5432 OPER	2022 REDOU NON-LIDO BID IBICHENINGUE PR 2022 RIDDOO Non-Labor 020 Professional Services AP	44.05 34.00 1.500 1.000.43	9.92 645 Customer Education Gene 001 203.42 135.15 Customer Education Gene 007	104192	MIKE ELLIS
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	D SS4 - Consorate Communications SS8 202202 098 D SS4 - Consorate Communications SS8 202207 098	Kinolawa Tawa Grid Di Ani a Matatani ( <u>B-RCO</u> )      Micelawa Tawa Suto RCOH in M005099021 (B-RCOH	Voucher OPER Voucher OPER	2022 800000 Nor-Labor 915 Printino PA 2022 800200 Nor-Labor 915 Printino PA	200.96 200.87 979.23 682.27	192.04 20.04 Postonar Education Gene (0) 192.08 88.88 Customer Education Gene (0)		
OFFICE SUPPLIES & EXPENSIES AA	2D S54 - Corporate Communications S56 202201 098 2D S54 - Corporate Communications S56 202206 098	67 Labor Cont USD 67 Labor Cont USD	Labor OPER Labor OPER	2022 821600 Labor 340 Regular Payrol - NJ PA 2022 821600 Labor 340 Regular Payrol - NJ PA	71 50.38 71 50.38	54.41 6.47 Telecon Services 001 54.41 6.47 Telecon Services 001		
OFFICE SUPPLIES & EXPENSES AA	2D S54 - Consorate Communications S54 202207 094	67 Labor Cost USD 17 Labor Cost USD	Labor OPER	2022 821000 Labor 340 Resulter Pantol - NJ PA	71 50.38	54.41 6.47 Telecon Services 001 54.75 6.63 Telecon Services 00		
OFFICE SUPPLIES & EXPENSIES AA	2D S54 - Consorate Communications S54 202207 094 2D S54 - Consorate Communications S54 202207 094	67 Labor Cost USD 19 Labor Cost USD	Labor OPER	2022 82100 Labor 340 Result Panol - NJ PA 2022 51000 Labor 340 Result Panol - NJ PA	71.26 50.38	56.41 6.47 Telecon Services 005 5.155.92 457.9 Common Series and Marke 00		
CLET SVC & NFO EXP-MISC AN	2D S54 - Concrete Communications S56 202110 066	30 Labor Cost USD Distribute Invices 16, ISCO General Services	Labor OPER Contractor 19540 OPER	2021 910000 Labor 340 Repuir Pantal - NJ PA 9001 910000 Non-Jabor 000 Dedeasional Services 40	7.447 3.694.30 9.500 4.403.60	2.546.13 1.018.09 Common Sales and Marke 005 2.956.00 1.182.11 Common Sales and Marke 005	110000	WERCHOTELLC
CLIST SVC & NEO EXP-MSC AA	2D S54 - Consorate Communications S54 202112 064	20 Dischass Incluse 16 MDC Band Research	Contractor 34228 OPER	2021 910000 Non-Labor 020 Professional Services AP	28.500 14.806.45	9737.02 3.696.51 Common Gales and Merid Of	99663	MDC RESEARCH
ELET SYC & IN-O LIN-MEC AA EMPLOYEE PENSIONS & BENEFITS N AA	20 304 - Lonsonne Lommunications 558 20208 098 20 354 - Corporate Communications 558 202207 098	0         Nummer 1         Numer 1         Nummer 1         Num	india         Action of the sector of th	2002 Interview AP 2002 S20000 Non-Labor 650 Training AP		The         The <td>119088 69462 69462 120507 120507 6445 10052 6445 60504 111957 111957 111957 111957</td> <td>Maic, KESEARCH Mair, Catherine Marie</td>	119088 69462 69462 120507 120507 6445 10052 6445 60504 111957 111957 111957 111957	Maic, KESEARCH Mair, Catherine Marie
ADMINA GENSALARIES AA OFFICE SUPPLIES & EXPENSES AA	22 S54 - Consorate Communications S58 202201 098 20 S54 - Consorate Communications S58 202111 098	eo Labor cost USD 15 Purchase Invices LE SALES TAX	Labor OPER Contractor 2021-062 OPER	2022 820000 Labor 340 Resulter Pantol - NJ PA 2021 821000 Non-Labor 020 Professional Services AP	147.09 103.99 26.7 18.09	29.75 13.35 Company Utility Initiatives 007 5.53 2.48 Vendor/Program SupportS 007	22096	CUTAWAY MEDIA
OFFICE SUPPLIES & EXPENSIES AN OFFICE SUPPLIES & EXPENSIES AN	20 554 - Consorate Communications 554 202111 066 20 554 - Consorate Communications 558 202112 066	H5 Disorbasis Indiana IIG SALES TAX 15 Purchase Inscises L5 DANA ANDERSON THE SPOKESIAN BOVEN	Voucher 2322 OPER Voucher 8785439-CC OPER	2021 821000 Non-Labor 907 Taxes AP 2021 821000 Non-Labor 905 Subscriptions AP	2.317.5 1.622.2 9.99 6.99	479.61 215.69 Vander/Program SupportS 00* 2.07 0.93 Vendor/Program SupportS 00*	12972	HINTON COLOR O INFORMATION COLOR O INFORMATION COLOR O INFORMATION COLOR O INFORMATION COLOR INFORMATION COLORIANO INFORMATION COLORIANO INFORMATIONA COLO
OFFICE SUPPLIES & EXPENSES AN OFFICE SUPPLIES & EXPENSES AN	2D 554 - Corporate Communications 554 202203 089 2D 554 - Corporate Communications 554 202203 next	15 Parchase Inscise LS US-Tax-LSPOK-SALES 15 Parchase Inscise LS DAM INDERSON-EWISTON TRELINE	Contractor 1000000115077 OPER Voucher 9135439-CC OPER	2022 821000 Non-Labor 020 Professional Services AP 2022 821000 Non-Labor 935 Subscriptions AP	262 277.45 258.8 253.65	79.39 35.63 Vendor/Program SuccentS 001 72.58 22.57 Vendor/Program SuccentS 01	110102	INTRADO DIGITAL ME CORP CREDIT CARE
OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA	20 954 - Consortie Communications 558 90205 009 20 954 - Consortie Communications 558 90205 009	HS Puschase Invoices LIS Dove. Renew Transform Subscription. Transform is used as an internal-internal survey tool for the Corp Comm team.     Doverseas Invoices IP Stock Images subscription	Voucher E1852301 OPER Contractor 19823086 / DOCD	2022 921000 Non-Labor 630 Date AP 2022 921000 Non-Labor 010 Division Generate	1.000 819.08 70 40.40	282.56 118. Vender/Program SupportS 007 16.16 6.55 Lander/Drogram SupportS 007	90504	Smith, Brandon R
OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA	2D SS4 - Comparise Communications SS8 202205 099 2D SS4 - Comparise Communications SS8 202205 099	15 Purchase Inscise LS LIS-Tax-LISPCK-GKLES 15 Purchase Inscise LS Stock Images for web and customer newsletter Jane	Ensitive Exp 1722013 OPER Ensitive Exp 17215876 / OPER	2022 921000 Non-Labor 215 Employee Max Expenses #P 2022 921000 Non-Labor 015 Employee Max Expenses #P	6.3 4.45 75 40.40	1.27 0.58 Vendor/Prooram Support 007 54.58 β 55 Vendor/Prooram Support 007	111821	GETTY INAGES US IN GETTY INAGES US IN
OFFICE SUPPLIES & EXPENSES AM OFFICE SUPPLIES & EXPENSES AM		15 Punchase Invices LS Subcolor for stock images for Connections and web.	Contractor 17202053 OPER	2022 821000 Non-Labor 000 Professional Services AP	70 49.49 70 49.49	14.16 6.25 Vender Prozram SupportS 007	111821	GETTY INAGES US IN
OFFICE SUPPLIES & EXPENSES AA	Arr         Sold - Consortie Communications         Sold         202209         066           3D         S54 - Consortie Communications         S54         202207         066	15 Percente remove un serval - USPUR-SALIDI 15 Desteue remove 16 US-Tax - OFFSPOR-OFFSET	Criminan Crim 1780830 CPNH Criminan Crim 1780839 CPER	2022 421000 Non-Labor DD Hotesecore Microsome AP	0.0 0.	0. 0. User vender#hooram SubportS 00t	111821	CETTY BACES US B
ADMINA GENSALARES AA ADMINA GENSALARES AA	22 S54 - Corporate Communications S58 202201 098 20 S54 - Corporate Communications S58 202203 098	aa Labor Cost USD 30 Labor Cost USD	Labor OPER Labor OPER	2022 820000 Labor 340 Reputer Payrol - NJ PA 2022 820000 Labor 340 Reputer Payrol - NJ PA	3.776 2.669.09 5,122 3,620.99	783.71 342.7 Common-Company Comr 001 1,036.08 464.93 Common-Company Comr 001		
ADMINIA GENISALARIES AA ADMINIA GENISALARIES AA	S54 - Consorate Communications         S54         202112         086           3D         S54 - Consorate Communications         S54         202110         086	00 Labor Cost USD 00 Labor Cost USD	Labor OPER Labor OPER	2021 820000 Labor 340 Resultr Panol - NJ PA 2021 820000 Labor 340 Resultr Panol - NJ PA	3.322.29 2.325.58 3.390.18 2.375	687.55 309.2 Common-Company Comr 001 702.22 215.81 Common-Company Comr 001		
ACMINA GENSALARIES AA ACMINA GENSALARIES AA	2D 554 - Consorate Communications 554 202111 066 2D 554 - Consorate Communications 554 202111 066	00 Labor CostUSD 00 Labor CostUSD	Labor OPER	2021 820000 Labor 340 Result Panel - NJ PA 2022 820000 Labor 941 Device David NJ Pa	3.301.44 2.310.56 5.007.26 9.036.40	683.22 307.27 Common Co		
ADMINE GENERALARIES AA	Intel Computer Communications         July         20208         089           2D         SS4 - Corporate Communications         SS4         20208         099           2D         D/4 - Computer Communications         SS4         20208         099	00 Labor Cost USD	Labor OPER	2022 820000 Labor 340 Regular Parol - NJ PA 2022 820000 Labor 340 Regular Parol - NJ PA	2,622,84 2,652,21	530.55 238.08 Common-Company Comit 007		
ADMINE GEN SALARES AA	AP SINE - Longorate Communications SSE 202111 086 20 SSE - Consorte Communications SSE 202110 086	an Laker Contribit		2021 S2000 Labor SHO Resulter Paintel - NJ PA 2021 S2000 Labor SHO Resulter Paintel - NJ PA	7.196.30 5.038.4 8.731.24 6.111.69	seeses brack Common-Company Comit 001 1.806.93 812.62 Common-Company Comit 001		
ADMINA GENISALARES AA	22 SS4 - Consorate Communications SS8 202203 098 20 SS4 - Consorate Communications SS8 202205 098	00 Labor ControlD 00 Labor ControlD	Labor OPER Labor OPER	Desc         Desc <thdesc< th="">         Desc         <thdesc< th=""> <thde< td=""><td>1 907.1 1.309.43 9.075 2.174.11</td><td>281.84 125.83 Common-Common Common Common Opt 622.08 229.15 Common-Common Comm 007</td><td>_</td><td>Smith, Brandon R, Colipe GSSOIT (ARE Lassa &amp; a schorwart Colipe GSSOIT (ORE Colipe GSSOIT (ORE</td></thde<></thdesc<></thdesc<>	1 907.1 1.309.43 9.075 2.174.11	281.84 125.83 Common-Common Common Common Opt 622.08 229.15 Common-Common Comm 007	_	Smith, Brandon R, Colipe GSSOIT (ARE Lassa & a schorwart Colipe GSSOIT (ORE Colipe GSSOIT (ORE
ADMINIL GENSALARES AA ADMINIL GENSALARES AA	2D S54 - Corporate Communications S58 202208 098 2D S54 - Corporate Communications S58 202111 nex	dd Labor Cost USD dd Labor Cost USD	Labor OPER Labor OPER	2022 820000 Labor 340 Regular Paytol - NJ PA 2021 820000 Labor 340 Regular Paytol - NJ PA	2,019,04 2,558,49 5,641 2,949	732.06 228.49 Common-Company Come 001 1.967 525 Common-Company Come 00		
ADMINA GENSALARES AA	20 954 - Consortie Communications 558 90202 069 20 954 - Consortie Communications 558 90202 069	0         Marcinetia           0         Marcinetia <td>Labor OPER Labor / DOCD</td> <td>2022 820000 Labor 340 Resulte Pantil - NJ PA 2022 820000 Labor 540 Resulte Pantil - NJ PA</td> <td>5047 3.587.80 8.006.12 6.546.60</td> <td>1.020.87 458.09 Common-Company Com/ 005 1.287.37 802.06 Common-Company Com/ 005</td> <td></td> <td></td>	Labor OPER Labor / DOCD	2022 820000 Labor 340 Resulte Pantil - NJ PA 2022 820000 Labor 540 Resulte Pantil - NJ PA	5047 3.587.80 8.006.12 6.546.60	1.020.87 458.09 Common-Company Com/ 005 1.287.37 802.06 Common-Company Com/ 005		
ADMINA GENSALARES AA	20 954 - Concrete Communications 254 20208 08	00 Labor Cost USD 00 Labor Cos		2022 820000 Labor 340 Result Parol NJ PA 2020 820000 Labor 340 Result Parol NJ PA	5778.12 4.082.02 1.027.25 2.000.02	1.197.68 524.12 Common-Company Come 007 971.66 524.79		
ADMINA GENSALARES AA	2D S54 - Corporate Communications S54 202200 094	ao Law Contuito	Labor OPER	2022 820000 Labor 340 Results Parts - NJ PA	3834 2.791.95	795.77 357.09 Common-Company Come 001		
ACMINE GENERALARES AA	20 Sold - Concesse Communications Sold 202259 08 20 SS4 - Concesse Communications SS4 202207 084	00 Later Contract 00 Later Contract	Labor OPER	2022 820000 Labor 340 Habiter Handler HU PA 2022 820000 Labor 340 Reputer Pantal - NJ PA	5.764.16 5.167.4.97	1165.97 523.22 Common-Company Colling Oct		
ACMINA GENSALARES AA ACMINA GENSALARES AA	2D SS4 - Consorate Communications SS8 202208 098 2D SS4 - Corporate Communications SS8 202207 098	20 Labor ContUSD 20 Labor ContUSD	Labor OPER Labor OPER	2022 820000 Labor 340 Resulter Perroll - NJ PA 2022 820000 Labor 340 Regular Payroll - NJ PA	20170 14.188.65 10,035.14 7,094.34	4.059.81 1.821.78 Common-Company Comr 001 2,029.91 913.89 Common-Company Comr 001		
OFFICE SUPPLIES & EXPENSIES AN OFFICE SUPPLIES & EXPENSIES AN	2D S54 - Consorate Communications S54 202112 064 2D S54 - Consorate Communications S54 202204 064	Parchase Invoices LS Misc. Employee recognition for Jae Ham (\$200) and Kurt Schubach (\$100). Report has already been submitted to HR for tax purposes     Parchase Invoices LS DANA ANDERSON HARVARD BLIS HER DRG	Ensive Ex E138251 OPER Ensive Ex 826439-CC OPER	2021 821000 Non-Labor 235 Employee Misc Expenses AP 2022 821000 Non-Labor 235 Employee Misc Expenses AP	600 419.09 58.5 41.36	124.17 SS&H Common-Company Come 001 11.83 S31 Common-Company Come 007	90524 6445 2015 6445 6445	Smith, Brandon R CORP CREDIT CARE
MSC GENERAL EXPENSE AA	2D S54 - Consorate Communications S54 202206 094	30 Divertises inverses 10 Magnet reprint for customeror kit	Contractor 20053 OPER	2022 \$30200 Non-Labor 020 Professional Services AP	475 2358	96.08 43.12 Common Common Come 005	2015	LIANNA & AGGOVINTE
OFFICE SUPPLIES & EXPENSES AA	20 S54 - Corporate Communications S54 202206 094	Do Puchase Industs ID DOW AND AND AND THE STATE OF T	Employee Eao 9529439-CC OPER	2022 821000 Non-Labor 235 Employee Misc Expenses AP	43.96 25.32	10.11 6.53 Common-Company Common	6445	CORP CREDIT CARE
ADMINE GENSALARES AA ADMINE GENSALARES AA	2D SS4 - Consorate Communications SS8 202110 098 2D SS4 - Consorate Communications SS8 202203 098	05 Labor Cost USD D5 Labor Cost USD	Labor OPER Labor OPER	2021 820000 Labor 340 Resulter Perroll - NJ PA 2022 820000 Labor 340 Resulter Perroll - NJ PA	8,798,49 6,158,35 6,493,93 4,590,92	1.920.85 B18.88 Internal Company Commu 005 1.213.57 S89.44 Internal Company Commu 005		
ACMINE GENSALARES AA	2D S54 - Consolate Communications S54 202111 094 2D S54 - Consolate Communications S54 202201 094	df Laber Cost USD	Labor OPER Labor OPER	2021 920000 Labor 340 Reputer Panol - NJ PA 2022 920000 Labor 340 Reputer Panol - NJ PA	4.092.6 2.094.78 4.195 2.965.58	B48.54 280.77 Internal Company Commun 004		
OUTSDE SERVICES EMPLOYED AA ACMINIA GENISALARES AA	2D S54 - Corporate Communications S54 202111 094 2D S54 - Corporate Communications S54 202111 094	Of Purchase Invoices US Intervals, Fund dat through Ragan Communications provides me team with monthly content we can use in a view.     Purchase Invoices US View design	Voucher E15104501 OPER Contractor 21-1108 OPER	2021 923000 Non-Labor 680 Materials & Equipment AP 2021 920000 Non-Labor 020 Professional Services AP	299 209.29	61.88 27.83 Internal Company Commu 001 186.26 83.76 Internal Company Commu 007	90504 100754 90504 100754 90504	Smith, Brandon R CREATINE CATCH ST
OFFICE SUPPLIES & EXPENSES AA	2D S54 - Consorate Communications S54 202201 084 2D S54 - Consorate Communications S56 202201 084	Of Purchase Invoices LE Maak, Internal Commit team lanch     Dechase Invoices LE View Assim	Ensive Ea E1559501 OPER Computer 22,000 OPER	2022 821000 Non-Labor 215 Employee Business Meals AP 2022 800000 Non-Labor 000 Diministrational Services 4D	61.05 000 07.050 000	12.79 6.19 Internal Company Commu 001 182.05 81.69 Internal Company Commu 00	90504	Smith, Brandon R CREATINE CATCH ST
OFFICE SUPPLIES & EXPENSES AA	20 S54 - Consorte Communications S54 202208 094	Purchase Invoices LE Lodains. For Desamforce conference	Employee Exp E17824501 OPER	2022 B21000 Non-Labor 200 Employee Lodging AP	2.437.39 2.430.06	695.32 212.01 Internal Company Commu 007	90504	Smith, Brandon R
ADMINE GENERALARES AL OFFICE SUPPLIES & DOFINIES AL MIC CENERAL DOFINIES AL MIC CENERAL DOFINIES AL MIC CENERAL DOFINIES AL MIC OF DEFINITION OF AL	2D S54 - Consorate Communications S54 202111 064	25 Later Cost USD	Labor OPER	2021 830200 Labor 340 Results Parol - NJ PA	3,170,91 2,219,57	656.22 295.12 Corporate ECP Pandemic Of		
NFO AND INSTRUCT ADVISITI SIDE OR	20 Sold - Concesse Communications Sold 202222 Oli 20 SS4 - Concesse Communications SS6 202222 Oli	28 Labor Cost USD	Labor OPER	2022 80500 Labor 340 Habite Hards - NJ PA 2022 805000 Labor 340 Reputer Pantal - NJ PA	443 696.16	685.16 OR Aby tor Conservation 001 695.16 OR Aby for Conservation 001		
INFO AND INSTRUCT ADVERTIDIP OR INFO AND INSTRUCT ADVERTIDIP OR	2D SS4 - Consorate Communications SS8 202112 068 2D SS4 - Corporate Communications SS8 202207 068	28 Purchase Invoices LS Connections customer newsletter Jan 2021 28 Purchase Invoices LS Residential print connections CR	Gottadar 75372 OPER Contadar 77221 OPER	2021 809800 Non-Labor 915 Printing AP 2022 909900 Non-Labor 020 Professional Services AP	2,435. 2,337.	2,435. OR Adv for Conservation 001 2,337. OR Adv for Conservation 001	6000 8000 104192 104192 6445 6445 6445 6445 104192 6445 104192 6445	NATIONAL COLOR G
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	2D S54 - Consorate Communications S58 202203 098 2D S54 - Consorate Communications S58 202208 098	Purchase Invoices US Social Media Customer Outreach and Education     Purchase Invoices US Social media customer outreach and education	Contractor 1284 OPER Contractor 1299 OPER	2022 830200 Non-Labor 020 Professional Services AP 2022 830200 Non-Labor 020 Professional Services AP	1.500 1.060.43 1.500 1.060.43	203.42 136.15 Customer Education Gene 001 203.42 136.15 Customer Education Gene 001	104192	MICE ELLIS MICE ELLIS
MSC GENERAL EXPENSE AA	2D S54 - Corporate Communications S54 202205 094 2D S54 - Corporate Communications S54 202205 094	Do Doctorea Incrine I/O DAM ANDERSON-FACERS, SHDCC21V/2     Punchase Inscises I/G DAM ANDERSON-FACERS, SHDCC21V/2     Punchase Inscises I/G DAM ANDERSON-FACERS, MIDDEN/2	Contractor 9279439-CC OPER Contractor 9279439-CC OPER	2022 800200 Non-Labor 020 Professional Services AP 2022 800200 Non-Labor 020 Professional Services AP	15. 114	2.03 1.37 Cristomer Education Gene (0) 10.11 6.54 Customer Education Gene (0)	6445	CORP CREDIT CARE
MSC GENERAL EXPENSE AA	2D S54 - Corporate Communications S54 202205 099	03 Purchase Involves LIG DANA ANDERSON-FACERE LIBPHDEV/22 Developer induces LIG DANA ANDERSON-FACERE LIBPHDEV/22	Contractor 9379439-CC OPER	2022 930200 Non-Labor 020 Professional Services AP	10 7.07	2.02 0.91 Customer Education Gene 001 0.02 0.31 Customer Education Gene 001	6445	CORP CREDIT CARE
MSC GENERAL EXPENSE AA	D S54 - Coporate Communications S56 20207 064	20 Purchase Invoices LS Social media customer outwards and education.	Contractor 1446 OPER	2022 800200 Non-Labor 020 Professional Services AP	1500 1.000.43	203.42 136.15 Customer Education Gene 005	104162	MAKE ELLIS
OFFICE SUPPLIES & EXPENSIES AA	20 Sold - Consorate Continuincations Sold 202209 044 20 SS4 - Consorate Communications SS4 202202 044	0 Labor Cost USD	Labor OPER	2022 REDOU NON-LIDO BITI ADVISING LIDENSE AP 2022 R21000 Labor 340 Result Panol - NJ PA	71.26 50.38	54.41 6.47 Telecon Services 007	646	11001001010100
OFFICE SUPPLIES & EXPENSION AN	2D SS4 - Corporate Communications SS6 202111 04 2D SS4 - Corporate Communications SS6 202203 04	07 Labor Contruidu	Later OPER	2021 127100 Labor 340 Hagutar Payosi - NJ PA 2022 92100 Labor 340 Resular Payosi - NJ PA	71.26 60.38	54.75 840 Telecon Services 001 54.41 8.47 Telecon Services 001		
ADMINA GENSALARES AA CLIST SVC & NFO EXP-MISC AA	2D S54 - Consorate Communications S54 202207 084 2D S54 - Consorate Communications S54 202205 084	66 Labor Cost USD	Labor OPER	2022 92000 Labor 340 Resulter Pantel - NJ PA 2022 910000 Labor 340 Resulter Pantel - NJ PA	664.29 483.83 3.421.96 1.794.9	128.44 62.12 Exeta Billing Outage 001 1.172.4 664.66 Common Galax and Marke 007		
CLIST SVC & NFO EXP-MSC AA	2D S54 - Consorate Communications S54 202209 064 2D S54 - Consorate Communications S54 202111 064	20 Labor Cost USD 20 Labor Cost USD	Labor OPER	2022 910000 Labor 340 Resulter Paintel - NJ PA 2021 910000 Labor 340 Resulter Paintel - NJ PA	7.555.17 3.540.78 5.295.37 2.782.22	2.588.47 1.025.92 Common Sales and Marke 001 1.809.17 723.98 Common Sales and Marke 001		
CLET SVC & NFO EXP-MISC AA	2D S54 - Concrete Communications S56 202112 066	20 Puchase Invices LS Adda Advisors online panel 20 Microlinance Transmit 1984 addisors online panel	Contractor 11-048710 OPER	2021 910000 Non-Labor 020 Professional Services AP 0000 910000 Non-Labor 0805 Microlensoral DA	106.160. 55.370.34 95 13.04	36,209,56 14,514,2 Common Sales and Marke 005 9,57 3,39 Common Sales and Marke 005	111218	ALDA US INC
CLIST SVC & NEO EXP-MISC AA	3D S54 - Consorate Communications S54 202209 094	20 Microleoure Tearse 1980 45-RETAL	Voucher OPER	2022 910000 Non-Labor BIS Miscelaneous PA	25. 13.04	8.57 3.39 Concessor Galax and Marine (0)		
ACMINE CENSALARES AA	ar 504 - Lonovate Communications 504 202110 068 20 S54 - Corporate Communications 556 202207 068	Image: Section of the sectio	Labor DPAR	2022 820000 Labor 343 Regular Payoli - NJ PA	4404.30 553.37 291.2	4.454.38 Customer s-ducation Cost 001 111.93 50.24 Workplace 2022 001	2015	Lord March 106 Sing Banash Sing Banash Sing Banash Sing Banash Mittone, Scholl Sol Mittone, Scholl Sol Mitt
ACMINA GENSALARES AA ACMINA GENSALARES AA	32 S54 - Cosporate Communications S58 202111 098 3D S54 - Corporate Communications S58 20202 098	60 Labor Contunia 60 Labor ContUSD	Later OPER Later OPER	2021 NAXOO Labor 340 Resulte Partol - NJ PA 2022 820000 Labor 340 Resulte Partol - NJ PA	220.04 154.44 18.39 13	43.67 20.53 Company Utility Initiatives 007 2.72 1.67 Company Utility Initiatives 007		
REGULATORY COMMISSION EXPENSES OR MSC GENERAL EXPENSE AA	2D S54 - Consorate Communications S58 202112 068 2D S54 - Consorate Communications S58 202202 068	69 Labor Cost USD 12 Purchase Invoices LS (2021 Annual Recort	Labor OPER Contractor 19013 OPER	2021 828020 Labor 340 Resulter Pantol - NJ PA 2022 820200 Non-Labor 020 Professional Services AP	95.37 510 360.56	55.37 (DhhD Garanii Data Case 103.16 46.3 Annual Report 007	27242	KLUNDT HOSMER DI
MSC GENERAL EXPENSE AA OFFICE SUPPLIES & EXPENSES AA	2D S54 - Corporate Communications S58 202205 098 2D S54 - Corporate Communications S58 202209 next	12 Purchase Inscises LS US-Tax-OFFSPOK-OFFSET 15 Purchase Inscises LS Media distribution and newsroom	Contractur 19124 OPER Contractur 1000000134200 OPER	2022 80000 Non-Labor 000 Professional Services AP 2022 821000 Non-Labor 000 Professional Services AP	0. 0. 4.343.25 3.039	0. 0. Annual Report 001 878.55 284.24 Vendor/Program S-revent on	27242	NTRADO DIGIT# 44
OFFICE SUPPLIES & EXPENSES AN	2D SS4 - Consolite Communications SS4 202110 086	15 Purchase Invices LE KELLY CONLEY-REGREDOMEN 15 Dephase Invices 16 Data AND DOMINITIE SPORE SAME SCHEW	Contractor #540439-CC OPER	2021 821000 Non-Labor 020 Professional Services AP	1095 356.40	226.61 101.91 Vendor/Program SupportS 005 217 0.91 Vendor/Program SupportS 005	22362 22262 119702 6465 6445 197022 197022 22086 197022 22086 197022 111801 197022 111801 197022 111801 197022	CORP CREDIT CAR
OFFICE SUPPLIES & EXPENSES AM	20 954 - Concrete Communications 254 202150 089	Pourbase Invices IS KELLY CONLEY-FORT ANIESOME STANDARD     Dechase Invices IS Kelly CONLEY-FORT ANIESOME STANDARD	Contracture #540439-CC OPER	2021 821000 Non-Labor 000 Professional Services #P 2021 821000 Non-Labor 000 Professional Services #P 2021 021000 Non-Labor 000 Professional Function	99 663 4211 Average	20.49 9.21 Vendor/Prozram SuccentS 007 07151 9921 Vendor/Prozram SuccentS 007	6445	CORP CREDIT CAR
OFFICE SUPPLIES & EXPENSES AA	20 S54 - Consultations S54 20200 064	15 Purchase Invoices LS Media distribution and newsroom	Contractor 1000000115077 OPER	2022 821000 Non-Labor 000 Professional Services AP	4.361 3.082.67	882.1 295.83 Vendor Program SupportS 007	110102	CORP CISENT AND INTRACO DUCIN, ME NTRACO DUCIN, ME NTRACO DUCIN, ME CUTRAVA MEDA CUTRAVA MEDA CUTRAVA MEDA CUTRAVA MEDA CUTRAVA MEDA CUTRAVA MEDA CUTRAVA MEDA
OFFICE SUPPLIES & EXPENSES AA	D S54 - Consume Communications S54 20205 064	15 Daurhana Russiuna 16 SAEST XX	Contractor 2022-020 OPER	202 821000 Non-Labor 000 Professional Services AP	2/382 M/ 27. 19.09	546 245 Vender+horsen Grovent (or	22006	CUTAWAY MEDIA
OFFICE SUPPLIES & EXPENSES AA	32 S54 - Corporate Communications S58 202205 098 3D S54 - Corporate Communications S58 202205 098	Hachase Invoices Liz Janua 7 TAX     Purchase Invoices Liz Media destitution and newsroom	Contractor 2022-026 OPER Contractor 100000122666 OPER	2022 Nor-Labor 000 Professional Services AP 2022 821000 Non-Labor 000 Professional Services AP	27 19.09 4.352.25 3.076.82	5.46 2.45 Vendor/Program Support5 001 880.37 285.06 Vendor/Program Support5 001	22090	DUTAWAY MEDIA NTRADO DIGITAL M
OFFICE SUPPLIES & EXPENSES AN OFFICE SUPPLIES & EXPENSES AN	2D S54 - Corsorate Communications S58 202205 098 2D S54 - Corsorate Communications S58 202205 098	15 Purchase Inscises LS Stock images for customer newsletter and web. 15 Purchase Inscises LS LIS-Tax - LISPOK-SALES	Employee Eao 17220170 OPER Contractor 100000124236 OPER	2022 821000 Non-Labor 235 Employee Misc Expenses #P 2022 821000 Non-Labor 020 Professional Services #P	70. 49.49 291.71 226.92	14.16 6.35 Vendor/Program Support\$ 001 78.24 35.55 Vendor/Program Support\$ 001	111821 110202	GETTY IMAGES US I NTRADO DIGITAL M
OFFICE SUPPLIES & EXPENSES AN OFFICE SUPPLIES & EXPENSES AN	20 554 - Consorate Communications 554 202209 069 20 554 - Consorate Communications 558 202209 next	H5 Decrement Invition IN US-Tax- OFFSPOK-OFFSET H5 Purchase Insides L5 US-Tax- OFFSPOK-OFFSET	Contractor 1000000137302 OPER Contractor 17497335 OPER	2022 921000 Non-Labor 000 Professional Services AP 2022 921000 Non-Labor 000 Professional Services AP	0 0	0. 0. Vandar/Program S-record 005 0. 0. Vandar/Program S-record 00	110002	GETTY MAGES 19
OFFICE SUPPLIES & EXPENSES AN OFFICE SUPPLIES & EXPENSES AN	2D 554 - Corporate Communications 554 202209 089 2D 554 - Corporate Communications 554 202209 089	HS Puntase Incides LE US-Tax-USPCK-GNLES HS Puntase Incides LE SALES TAX	Contractor 100000117302 OPER Voucher 2022-037 OPER	2022 821000 Non-Labor 000 Professional Services AP 2022 821000 Non-Labor 815 Non-Validis Durin Danati	362.56 277.52 27. 10.10	79.41 35.63 Vendor/Program SupportS 001 5.66 2.45 Vendor/Drogram SupportS 001	110102	NTRADO DIGITAL M CUTAWAY MET
ADMINA GENISALARES AA	2D SS4 - Concrete Communications SS4 202110 089	00 Labor Cost USD	Labor OPER	2021 820000 Labor 340 Results Parol - NJ PA	7.299.3 5.199.36	1.510.58 679.39 Common-Company Come 007		and the second second
ACMINE GENSALARES AA	Ar         Sold - Consume Communications         Sold         202112         066           D         SS4 - Consume Communications         SS4         202207         066	00 Labor Cost USD	Lat         CON         CON	AMA MANAGE LABOY 240 HABURE FAMILE NU PA 2022 B20000 Laboy 340 Resulte Pantel - NJ PA		Image         Image <th< td=""><td></td><td></td></th<>		
ACAINA GENSALARES AA	20 Sol - Corporate Communications Sol 202112 066 20 S54 - Consorate Communications S58 202201 066	00 Labor ContUSD	Labor OPER	2022 820000 Labor 340 Haguar Paytor NU PA 2022 820000 Labor 340 Resultr Paytor NU PA	2,058.96 1,659.83 5.301 2,767.62	1072.31 481.18 Common-Company Comr 001	_	
ADMINA GENSALARIES AA	32 S54 - Cosporate Communications S54 202203 098 3D S54 - Cosporate Communications S54 202112 098	00 Labor Contrast 00 Labor Cont USD	Lator OPER Lator OPER	2021 INDUD Labor 340 Resulte Pantel - NJ PA 2021 K20000 Labor 340 Resulte Pantel - NJ PA	5725 4.047.4 5.343.66 2.740.45	1.136.08 519.69 Common-Company Come 001 1.105.62 497.54 Common-Company Come 001		
ADMINA GENSALARIES AA	2D 554 - Consorate Communications 554 202206 066 2D 554 - Corporate Communications 558 202209 next	00 Labor Cost USD 00 Labor Cost USD	Labor OPER Labor OPER	2022 820000 Labor 340 Resultr Panol - NJ PA 2022 820000 Labor 340 Resultr Panol - NJ PA	6.003 6.081.88 5,047 2.507.79	178321 780.91 Common-Company Comm 005 1,020.85 458.09 Common-Company Comm 00		
ACMINA GENSALARES AA	2D 554 - Consorate Communications 554 202111 086 2D 554 - Consorate Communications 554 940++9 044	00 Labor CostUSD 00 Labor CostUSD	Labor OPER	2021 820000 Labor 340 Result Pantel NJ PA 2021 820000 Labor 340 Result Pantel NJ PA	3478.45 2.715.12 3.296 2.046.40	802.73 381. Common-Company Come 001 675.58 394. Common-Company Come 001		
ADMINA GENSALARES AA	2D S54 - Consorte Communications S54 202205 094	00 Labor Cost USD	Labor OPER	2022 820000 Labor 240 Results Panol - NJ PA	4905.01 4.900 19.507 6.300	1.402.81 622.49 Common Common Come (0) 2.402.42 511710		
ADMINE GENERALARIES AA	Inter-Compare Communications         June         202020         084           2D         SS4 - Corporate Communications         SS4         20205         094           2D         D/4         Communications         SS4         20205         094	00 Labor Cost USD	Labor OPER	2022 820000 Labor 340 Regular Parol - NJ PA 2022 820000 Labor 340 Regular Parol - NJ PA	13,360 8,453 1	2706.54 1,214.52 Common-Company Common		
OFFICE SUPPLIES & EXPENSES AN MISC GENERAL EXPENSE AN	20 504 - Lossonae Communications 558 202110 089 20 554 - Consorate Communications 558 202206 089	20 Purchase Involues LSL Catherine Mar enconnec assessment 20 Purchase Involues LSL Professional Photo for Collors Ducken	Contractor 202042 OPER	2022 R21020 Non-Labor 020 Professional Services AP 2022 R00200 Non-Labor 020 Professional Services AP	50. 26. 560. 285.89	no.ex 4.65 Common-Company Comit 001 113.28 50.83 Common-Company Comit 001	29835	DEAN DAVIS PHOT
MSC GENERAL EXPENSE AA ADMINIA GENSALARIES AA	20 554 - Consorate Communications 554 202209 066 20 554 - Consorate Communications 558 202111 066	00 Decembrane Involvent I/S Video of Latry LaBole history presentation 01 Labor Cost USD	Contractor 1011 OPER Labor OPER	2022 800200 Non-Labor 000 Professional Services AP 2021 820000 Labor 340 Resular Panol - NJ PA	950 671.6 6.517 4.502.04	182.17 86.23 Common Commany Common Opt 1.348.78 606.58 Internal Company Commu 00*	97396	BACKIO MEDIA
ADMINE CENSALARIES AA	2D 554 - Corporate Communications 554 202201 066 2D 554 - Corporate Communications 554 910204 066	D1 Labor CostUSD	Labor OPER Labor OPER	2022 820000 Labor 340 Regular Payrol - NJ PA 2022 820000 Labor 340 Regular Payrol - NJ PA	4,562.18 3,225.38 7.136 5,744.87	922.84 414.1 Internal Company Commu 001 1.443.49 647.74 Internal Cognany Commu 00		
ADMINA GENISALARES AA	2D SS4 - Concernant Communications SS8 202205 099	dn Labor CostUSD	Labor OPER	2022 820000 Labor 340 Result Paral NU PA	1.322 904.23 11.200 0.001.07	267.31 119.96 Internal Company Commu 007		
ADMINIA GENISALARIES AA	are         Constraint         SM         202030         066           3D         S54 - Constraint Communications         S54         202020         066	Bit Sector         And Sector           Bit Sector         And Sector <t< td=""><td>Contractor 22-0298 OPER</td><td>2022 R20000 Non-Labor 002 Palescine Particles AP</td><td>900 600 26</td><td>182.05 B1.09 Internal Company Commu 007</td><td>100754</td><td>CREATINE CATCH</td></t<>	Contractor 22-0298 OPER	2022 R20000 Non-Labor 002 Palescine Particles AP	900 600 26	182.05 B1.09 Internal Company Commu 007	100754	CREATINE CATCH
MSC GENERAL EXPENSES AM	Sol - Corporate Communications         Sol 202208         066           2D         S54 - Consorate Communications         S58         202110         066	en Parceare senses sa juarenteca, unanteca consenso a tarter konnege about sametoce tunctorany 15 Labor ContUSD	Labor OPER	2021 800000 Labor 202 Committee Here AP 2021 800000 Labor 202 Incentive/Roma Ray PA	974 680.75 6.500 4.549.87	1.345.18 604.95 Corporate COP Pandenic 001	90304	senen, wrandon R
INFO AND INSTRUCT ADVERTID/P OR INFO AND INSTRUCT ADVERTID/P OR	az 554 - Consorate Communications 558 202208 068 2D 554 - Consorate Communications 558 202208 nate	De Labor Cont USD	Labor OPER Labor OPER	2022 808000 Labor 340 Resular Pantel - NJ PA 2022 808000 Labor 340 Resular Pantel - NJ DA	400.82 665.7	665.7 OR Adv Sz Conservation 001 665.7 OR Adv Sz Conservation 001		
INFO AND INSTRUCT ADVERTIDIP OR INFO AND INSTRUCT ADVERTIDIP (P	20 554 - Concorate Communications 554 202112 040 20 554 - Concorate Communications 554 501+10 040	Purchase Invices LE Connections customer measinter Dec 2021     Purchase Invices LE UP-Tax-LISPCN-GALES	Voucher 75005 OPER Contractor 9608509 OPER	2021 809000 Non-Labor 915 Printing AP 2021 809000 Non-Labor 020 Professional Services AP	2.435	2.435. OR Adv Sz Conservation 005 53.8 OR Adv Sz Conservation 005	8868 111821 2015 194952 192927 6445 6445 6445 194952	NATIONAL COLOR
INFO AND INSTRUCT ADVERTISIP OR	2D SS4 - Concrete Communications SS4 202206 06	Purchase Invices LS OR CAT ASE for production     Dephase Invices IS Social Media Contraction of Education	Contracture 20052 OPER	2022 809000 Non-Labor 000 Professional Services #P	2275	2.270. OR Adv for Conservation 007	2015	HANNA & ASSOCIA
MSC GENERAL EXPENSE AA	20 S54 - Converte Communications S54 202150 064	Kinestense men in den konstanten sonstanten en sekalenten	Voucher OPER	2021 800200 Nor-Labor 915 Printing PA	200.92 214.64	43.52 23.56 Customer Education Game (0)		1000 0 0 0 0
MEC GENERAL EXPENSE AA	20 504 - Lossonae Communications 556 202202 096 20 554 - Corporate Communications 556 202205 096	Inc. Previouse vedicials List (Micc. Land soft activity for audie 1008/ Purchase Exolose List (DAMA ANDERSON-FACEBIK BD/BMCEW/2	Contractor \$278439-CC OPER	2022 INDEXESTING INDEXESTING AND ADDRESS APP	10 7.07	2.02 0.91 Customer Education Gene 001 2.02 0.91 Customer Education Gene 001	102597	Mar. Catherine Mar CORP CREDIT CA
MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	20 554 - Consorate Communications 554 202205 066 20 554 - Consorate Communications 558 202206 next	00 Puntase Insider LE DANA ANDERSON-FACEEX DOCED/07/2 00 Puntase Insider LE Social media customer outreach and education.	Contractor 9379438-CC OPER Contractor 9431 OPER	2022 800200 Non-Labor 000 Professional Services AP 2022 800200 Non-Labor 000 Professional Services AP	10 7.07 1.500 1.060.49	2.02 0.91 Customer Education Gene 005 202.42 126.15 Customer Education Gene 00	6645 104999	CORP CREDIT CA MIKE FILLS
	2D S54 - Concrete Communications S54 202208 08	Kitoralineana Tanana G Hill Dr Cui an attractionan ( 199-RCCH     Labor Cont 160		2022 830200 Non-Labor 915 Printing PA	1136.66 803.56	229.92 103.18 Customer Education (007 54.44 0.47 Telecom Service 007		
MSC GENERAL DIPENSE AA	and         Sector         Sector <td>07 Labor Cost USD</td> <td>Labor OPER</td> <td>2022 821000 Labor 340 Regular Parol - NJ PA 2020 821000 Labor 340 Regular Parol - NJ PA</td> <td>71.26 50.38</td> <td>54.41 6.47 Telecon Services 007</td> <td></td> <td></td>	07 Labor Cost USD	Labor OPER	2022 821000 Labor 340 Regular Parol - NJ PA 2020 821000 Labor 340 Regular Parol - NJ PA	71.26 50.38	54.41 6.47 Telecon Services 007		
MIC GENERAL EXPENSE AA OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA	20 504 - Lossonae Communications 558 202268 098 20 554 - Consorate Communications 558 202112 098	or Later Consulta 07 Later Consulta	Labor OPER Labor OPER	2021 M21600 Labor 340 Resulter Partol - NJ PA 2021 821600 Labor 340 Resulter Partol - NJ PA	71.26 50.38 71.26 49.88	14.75 0.60 Telecon Services 001 14.75 0.60 Telecon Services 001		
MSC GENERAL EXPENSES AN OFFICE SUPPLES & EXPENSES AN OFFICE SUPPLES & EXPENSES AN OFFICE SUPPLES & EXPENSES AN OFFICE SUPPLES & EXPENSES AN	2D 554 - Corporate Communications 554 202203 099 2D 554 - Corporate Communications 559 202209 099	67 Labor Cost USD 67 Labor Cost USD	Labor OPER Labor OPER	2022 82160 Labor 340 Resulte Panoli - NJ PA 2022 82160 Labor 340 Resulte Panoli - NJ PA	71.26 50.38 71 50.38	14.41 6.47 Telecon Services 001 14.41 6.47 Telecon Services 007		
MEC GENERAL DOPINE AN OFFICE SUPPLIES ADDENSES AN	2D S54 - Corporate Communications S54 202207 094	07 Labor CostUSD	Labor OPER	2022 821000 Labor 343 Reputer Payoli - NU PA 2020 821000 Labor 543 Reputer Payoli - NU PA	71 50.38	54.41 6.47 Telecon Services 000 54.41 6.47 Telecon Services 000		
MEC GERRA DISTRET OFFICE SUPPLIES ADVENTIGE AM OFFICE SUPPLIES ADVENTIGE AM		n and an and a second sec	Labor OPER	2022 821600 Labor 2401House Pantal - NJ PA	71.4W 50.38 71.26 50.38	54.41 6.47 Telecon Services 001 54.41 6.47 Telecon Services 001		
Mol CaleBox, ESTOLIZE CONTROL STATUS AND AND AND AND AND OFFICE STAPPLIES A SUPPORTS AND AND AND AND AND AND AND OFFICE STAPPLIES A SUPPORTS AND OFFICE STAPPLIES A SUPERS AND OFFICE STAPPLIES A SUPPORTS AND AND AND AND AND AND AND AND	2D SS4 - Consorte Communications SS4 202202 084 2D SS4 - Consorte Communications SS8 202208 084	DP LEAF CRITER						
Mot Califord, Electron and An ortical adjustance a porticipation of ortical adjustance a porticipation of ortical subprises a porticipation of An ortical subprises a porticipation	3D         SE4 - Consorate Communications         SE4         202020         064           3D         SE4 - Consorate Communications         SE4         202040         066           3D         SE4 - Consorate Communications         SE4         202027         069           3D         SE4 - Consorate Communications         SE4         202027         069           3D         SE4 - Consorate Communications         SE4         20217         069           3D         SE4 - Consorate Communications         SE4         202119         064	tor Labor Contrista     tabor Contrista     tabor Contrista     tabor Contrista	Labor OPER Labor OPER	2022 420000 Labor 340 Resulter Partol - NJ PA 2021 410000 Labor 340 Resulter Partol - NJ PA	4.429.7 2.310.67	1.513.4 605.63 Common Sales and Marke OD1		
Micro Gradow, Diologia Concession, Solidania Concession, Santania Concession, Santani	D         SE4 - Concents Communications         SE4         20202         000           D         SE4 - Concents Communications         SE4         20201         000           D         SE4 - Concents Communications         SE4         20201         000           D         SE4 - Concents Communications         SE4         20202         000	0         Labor Controlling           0         Labor Controlling           20         Partname Incluse Life (\$455.75X)           20         Monolineana Transc 1980           460-967.74	Labor OPSR Labor OPSR Commuter 493662 OPSR Voucher OPSR	2022         800000         Lator         340 Resolar Paval - NJ         PA           2021         810000         Lator         340 Resolar Paval - NJ         PA           2021         810000         Lator         300 Resolar Paval - NJ         PA           2021         810000         Nen-Lator         020 Professional Services         AP           2022         810000         Nen-Lator         816 Microslamesus         PA	1.00.0 1.200.07 4.629.7 2.210.67 9.100.99 4.750.09 25 1.201	1513.4 605.63 Common Sales and Marke 007 3,143.18 1,257.82 Common Sales and Marke 001 8.57 3.39 Common Sales and Marke 001	27268	VERNT AMERICAS
Biol Constraint, Displace         An           Constraint, Displace         An           Constraint, Displace         Sectors	D2         B4choose (commutative, b4-choose (commutative, commutative, commutative, commutative, commutative, commut	Mater Carriedo         Jacobic Carriedo           Jacobic Carriedo         Jacobic Carriedo           Mater Carriedo         Jacobic Carriedo	Labor OFER Labor OFER Communic 43/050 OFER Vaucher Value OFER Vaucher 28208 OFER Communic OFER	2020         IA0000         Labor         340 Result Provid: HJ         PA           2021         I+0000         Labor         340 Result Provid: HJ         PA           2021         I+0000         Non-Labor         340 Result Provid: HJ         PA           2021         I+0000         Non-Labor         600 Hotsensord Services         AP           2021         I+0000         Non-Labor         810 Amethinis Generates         PA           2021         I40000         Non-Labor         610 Amethinis Generates         AP           2021         I402000         Non-Labor         610 Amethinis Generates         AP	1 306.6 1 306.00 4.4507 2.370.67 9.150.90 4.706.00 25. 13.06 465 209.77 265.17	153.4 605.63 Common Sains and Nerke (0) 3,143.14 1,257.42 Common Sains and Nerke (0) 8,57 2.39 Common Sains and Nerke (0) 455 Countomer Education Cole (0) 78,39 255 United Network Over Cole	27268 2015 110109	VERNT AMERICAS HANNA & ASSOCIA MERICO DISTRI I
MacCodesis, control & M. Corres Survives Extension & M.							27288 2015 110102 20066 6445 111821 111821	CREATING CA Institution of the second of the second INTERNAL COLOR OF THE SECOND OF THE SECOND INSTITUTION OF THE SECOND OF THE SECOND OF THE SECOND INSTITUTION OF THE SECOND OF TH

921000	OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA	0	SS4 - Consorate Communications SS4 - Corporate Communications SS4 - Consorate Communications SS4 - Consorate Communications	554 202201 554 202202 554 202203 554 202203	09900015 09900015 09900015 09900015	Purchama herical (E) (UST-III INFO-CALES Purcham herical (E) (UST-IIII FS CANESAWAGO/KW Purcham herical (E) (UST-IIIII INFO-CALES Purcham herical (E) (UST-IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Emolovee Eao 58825987 Voucher 9025439-CC Contractor 98829396 Contractor 17024546	OPER 20 OPER 20 OPER 20 OPER 20	222         14 (2000)           223         44 (2000)           224         42 (2000)           222         42 (2000)           223         42 (2000)           224         42 (2000)           223         42 (2000)           224         42 (2000)           223         44 (2000)           223         44 (2000)           223         44 (2000)           223         44 (2000)           223         44 (2000)           223         44 (2000)           223         44 (2000)           224         44 (2000)           225         44 (2000)           226         44 (2000)           227         44 (2000)           228         44 (2000)           229         44 (2000)           221         44 (2000)           222         44 (2000)           223         44 (2000)           224         44 (2000)           225         44 (2000)           226         44 (2000)           227         44 (2000)           228         44 (2000)	Non-Labor Non-Labor Non-Labor Non-Labor	235 Employee Misc Extenses AP 635 Subscriptions AP 500 Professional Services AP 600 Professional Services AP 600 Professional Services AP 600 Professional Services AP 600 Professional Services AP	63 428 63 63	4.45 20.26 4.45 4.45	1.27 8.66 1.27 1.27	0.58 Vendor/Prooram SupportS 001 3.88 Vendor/Prooram SupportS 001 0.58 Vendor/Prooram SupportS 001 0.58 Vendor/Prooram SupportS 001	111821 6465 111821 111821 2086 2086 2086 2086 2086 2086 2086 2086	GETTY INAGES LIG IS CAT A CORP CREDIT CARE INST CAT A GETTY INAGES LIG IS CAT A GETTY INAGES LIG IS CAT A
921000 921000	OFFICE SUPPLIES & EXPENSIES AA OFFICE SUPPLIES & EXPENSIES AA	0	954 - Corporate Communications 954 - Communications	S54 202200 S54 202200	09900015	Parchase Inscisse LG 105-Tax - USPCK-GALES Dechase Inscisse 10, 105-Tax - USPCK-GALES	Contractor 19929396 Contractor 12004546	0PER 20	102 921000 102 921000	Non-Labor Non-Labor	000 Professional Services AP 000 Dodessional Services AP	6.3	4.45	1.27	0.58 Vendor/Program SupportS 001 0.58 Vendor/Program SupportS 001	111821	GETTY INAGES US IN CAT A
921000	OFFICE SUPPLIES & EXPENSES AN	0		554 202203	09900015	Dechamic Indext of Variation V Variation Variation Variation Variation Variatio Variatio Variation Variatio Variation Variation Variation Variation Variation Variatio	Contractor 2022-015	OPER 20	122 921000	Non-Labor	COO Professional Services AP	27.	19.09	5.46	2.45 VenterBrows Ground (00)	22096	CUTAWAY MEDIA not CAT A
921000 921000 921000	OFFICE SUPPLIES & EXPENSIES AA	0	SS4 - Corporate Communications SS4 - Corporate Communications	20200           SSA         20200           SSA         20205           SSA         20205           SSA         20205           SSA         20205           SSA         20205           SSA         20205           SSA         20206           SSA         20206           SSA         20206           SSA         20206           SSA         20206           SSA         20208	09900015 09900015 09900015		Contractor 2022-015 Contractor 2025-073 Contractor 2025-047	OPER 20 OPER 20 OPER 20	22 921000 22 921000	Non-Labor Non-Labor Non-Labor	020 Professional Services AP 020 Professional Services AP	26.7	19.09 18.00 212.09 212.09 212.09	546 54 6008 54 6008 0.0 14.16 0. 0	0.58 Vendor/Procram SuspertS 001 2.45 Vendor/Procram SuspertS 001 2.42 Vendor/Procram SuspertS 001 27.23 Vendor/Program SuspertS 001	22006	CUTAWAY MEDIA CUTAWAY MEDIA CUTAWAY MEDIA CUTAWAY MEDIA CUTAWAY MEDIA
901000 901000	OFFICE SUPPLIES & EXPENSES AA	0	SIS4 - Corporate Communications	\$54 202205	09900015 09900015	Pachase Invices LE SALES TAX	Contractor 2021-058	OPER 20 OPER 20	821000	Non-Labor Non-Labor	020 Professional Services AP 020 Professional Services AP	26.7	18.88	5.4	2.42 Vendor/Program SupportS 001 27.23 Vendor/Program SupportS 001	22096	CUTAWAY MEDIA not CAT A
921000	OFFICE SUPPLIES & EXPENSES AN	0	SIS4 - Colocrate Communications SIS4 - Corporate Communications	S54 202205	09900015	Putchase findess Lts, Meda monocord Developes Territor 10, Meda monocord	Contractor 2022-029		22 821000 122 821000	Non-Labor	COD Professional Services AP	200	212.09	60.68	27.23 VendorPhopram Subports Upt 27.23 VendorPhopram Gunnott Opt	22089	CUTAWAY MEDIA INST CAT A
921000 921000 921000	OFFICE SUPPLES & EXPENSES AM OFFICE SUPPLES & EXPENSES AM OFFICE SUPPLES & EXPENSES AM OFFICE SUPPLES & EXPENSES AM OFFICE SUPPLES & EXPENSES AM	0	64- Compariso Communications     64- Compariso Communications     64- Communications	S54 202207	09900015 09900015 09900015	Postan Insola 10 Bala Status     Postan Insola 10 Bala     Postan Insola 10 Bala Status     Postan Insola 10 Bala     Postan     Postan Insola 10 Bala     Postan     Postan Insola 10 Bala     Posta	Contractor 2025-688 Contractor 2022-628 Contractor 2022-629 Employee Excl 17255878 Contractor 17963785 Contractor 17963785 Contractor 17963653 Contractor 1900000130793	0PER 20 0PER 20 0PER 20	122 921000	Non-Labor Non-Labor Non-Labor Non-Labor Non-Labor	020 Professional Services. AP 225 Employee Misc Expenses. AP 020 Professional Services. AP		0. 49.49	0.	0 Vendor/Program Supports 001 6.35 Vendor/Program SupportS 001	111821	DUTAWAY MEDIA ROL CAT A DUTAWAY MEDIA ROL CAT A DUTAWAY MEDIA ROL CAT A GETTY IMAGES LIS IN CAT A GETTY IMAGES LIS IN CAT A
921000 921000 921000	OFFICE SUPPLES & EXPENSES AM OFFICE SUPPLES & EXPENSES AM	0	SISE - Colporate Communications SISE - Corporate Communications	SSA 202209 SSA 202209 SSA 202208	09900015 09900015	Putchase functed to Subscripton for stock images for contentions and web Putchase functed to Unit-Tax-of-FSPON-OFFSET	Contractor 1766/205	OPER 20 OPER 20	22 821000 22 821000 22 821000	Non-Labor	020 Professional Services AP 020 Professional Services AP		69.69	0.	Usion Content Subscription     Vendor/Program Subscript 001     Vendor/Program Subscript 001	111821	GETTY INAGES US IN CAT A NTRADO DIGITAL ME NOT CAT A
921000	OFFICE SUPPLIES & EXPENSES AA	0	SS4 - Corporate Communications	S54 202208	09900015	Purchase Insoles LS US-Tax- OFFSPOK-OFFSET-OFFSET	Contractor 1000000130783	OPER 20	921000	Non-Labor	020 Professional Services AP	0.	0.	0.	0. Vendor/Program SupportS 001	110102	INTRADO DIGITAL ME not CAT A
925000 925000 925000 925000 925000 925000	ADMINI GENSALARES AA ADMINI GENSALARES AA ADMINI GENSALARES AA	0	SIS4 - Corporate Communications	20200           SSA         202204           SSA         202207           SSA         202107           SSA         202202           SSA         202202           SSA         202202           SSA         202202           SSA         202203           SSA         202208           SSA         202208           SSA         202209	09902330 09902330 09902330		Labor	OPER 20	22 82000 22 82000	Labor Labor	020 Professional Services APP 340 Resolar Panoli - NJ PA 340 Resolar Panoli - NJ PA	3.301.44	4.972.32 2.333.95 2,191.35	0. 1.42274 647.61 1.226.13 1.286.13 1.296.38 1.296.38 1.293.64 1.005.29 1.202.00 1.222.02	d. Verder/Frozens SuscertS 061     dist.47 Fromono-Tommann-Tomman		labor labor
920000	ADMINIL GENISALARIES AA	0	SIS4 - Corporate Communications	S54 202207	09900330	Labor Cost USD	Labor	OPER 20	92000	Labor	340 Regular Payrol - NJ PA	3,205,44 3,200,73 2,600,77 5,600,77 6,931,7 6,931,7 6,932,30 5,902,74	2,191.35	627.01	281.37 Common-Company Come 001		labor
920000	ADMINE GENSALARES AA	0	S54 - Corporate Communications	554 202202	09900330	Labor Cost URD	Labor	OPER 20	22 820000	Labor	340 Regular Pavrol - NJ PA 340 Regular Pavrol - NJ PA	5.904.77	4.198.51	1.220.13	537.8 Common-Company Comr 001		abor jabor
920000	ADMINE GENSALARES AN ADMINE GENSALARES AN ADMINE GENSALARES AN ADMINE GENSALARES AN ADMINE GENSALARES AN	60	S54 - Corporate Communications	\$54 202206	09900330 09900330 09900330	Labor CostUSD	Labor	OPER 20	920000	Labor	340 Reputer Payroll - NJ PA	6.101.7	4.147.22 4.188.51 4.256.01 4.203.15 3,608.5	1,246,38	559.31 Common Commany Come 001		labor
922000	ACAINA CENSALARES AA		SS4 - Corporate Communications SS4 - Corporate Communications	S54 202208	09900220	Labor Cost USD	Labor	0PER 20	122 #20000 122 #20000	Labor	340 Reputer Payroll - NJ PA Set) Reputer Payroll - NJ PA	6.129.30	4.323.15	1.229.84	556.37 Common-Company Come 001 463.45 Common-Company Come 001		labor labor
923000	ADMINIA GENISALARIES AA ADMINIA GENISALARIES AA	0	SIS4 - Corporate Communications	954 202204 954 202203	09900220	Labor Cost USD	Labor	OPER 20 OPER 20	820000	Labor	340 Reputer Pavrol - NJ PA	4.970 6.061.2	3.513.38 4.270.82	1.005.29	451.1 Common-Company Come 001 548.36 Common-Company Come 001		labor
920000	ADMINA GENSALARES AA		SIS4 - Corporate Communications	S54 202203	09900230	Labor Cost USD	Labor	0PER 20	122 820000	Labor	340 Regular Pavrol - NJ PA 340 Regular Pavrol - NJ PA	6.061.2	4.270.82	1.222.02	548.36 Common-Company Comr 001 557.78 Common-Company Comr 001		labor
923000 923000 923000	ADMINE GENSALARES AA ADMINE GENSALARES AA	60	S54 - Corporate Communications	202005           S54         202205           S58         202207           S54         202207           S58         202201	099002300 099002300 099002300	Laar Castilida Laar Castilida Laar Castilida Laar Castilida	Labor	OPER 20	22 80000 222 80000 222 80000 222 80000 221 80000 222 80000 222 80000 222 80000 221 80000 222 80000 221 80000 222 80000 221 80000 221 80000	Labor	340 Result Pandi - NJ, PN 340 Result Pandi - NJ, PN	6.0812 4.550 2.450 5.000.05 2.011.0 3.060.02 10.200.0 5.712.0 6.601 6.011	4.344.2 5.302.55 4.342.23	1 22202 1 24302 1 505.81 1 205.81 1 205.82 487.88 808.17 2 25236 1 525.22 1 525.25 1 525.25 1 525.46 1	684.67 Common-Company Come 001		labor
920000	ADAINA CENSALARES AA		SIS4 - Corporate Communications	SS4 202207	09900330	Labor Cost USD	Labor	OPER 20	122 \$20000	Labor	340 Regular Payrol - NJ PA	6,142	4,362.23	1,242.45	557.53 Common-Company Come 001		abor
920000	ADMINE GENERALARES AA	0	SIS4 - Corporate Communications	554 202207	09900330 09900330 09900330 09900330 09900330	Lato Const 20     Lator Const 20	Labor	OPER 20	122 820000	Labor	240 Regular Pavrol - NJ PA	2.313.08	4, 164, 12 1, 605, 22 2, 624, 49 9, 309, 45 2, 760, 66	467.89	299.96 Common-Company Come 001		labor
923000 923000 923000	ADMINIA GENISALARIES AA	00	S54 - Corporate Communications	554 202208	09900330	Labor Cost USD	Labor	OPER 20	122 820000	Labor	340 Regular Payrol - NJ PA	1995.32	2.824.49	808.17	362.66 Cranses Comment Open 001		labor
920000	ADMINE GENSALARES AA ADMINE GENSALARES AA ADMINE GENSALARES AA ADMINE GENSALARES AA ADMINE GENSALARES AA	60	SIS4 - Corporate Communications	S54 202201	09900330	Labor Cost USD	Labor	OPER 20	920000	Labor	340 Regular Payrol - NJ PA	5,213.04	3,760.96	1,076.1	482.88 Common-Company Come 001		labor
923000 923000	ADMINA GENSALARIES AA ADMINA GENSALARIES AA		SS4 - Corporate Communications SS4 - Corporate Communications	954 202208 954 202111	09900230	Labor Cost USD Labor Cost USD	Labor	OPER 20 OPER 20	122 820000 124 820000	Labor	340 Reputer Payroll - NJ PA Set) Reputer Payroll - NJ PA	6.001	6.123.35 4.802.55	1.754.94	787.49 Common-Company Come 001 638.56 Common-Company Come 001		labor labor
923000 923000 923000		0	SIS4 - Corporate Communications	Solit         202311           Solit         202208	09900330 09900330 09900330	Les Coulision Les Co	Labor Labor Labor	OPER 20	82000	Labor	201 Resource Paintin - No. 199     201 Resource Paintin - No. 199     201 Resource Paintin - NJ. PA     201 Resource Paintiness Mail.     201 Prodessional Services. AP     201 Prodessional Services. AP     201 Professional Services. AP	2 205 7 277; 9 11; 165.20 308.09 37.20 756, 756, 756,	6,000,22 5,403,00 9,321,36 3,325,75 251,24 26,36 300,21 500,21	145248 140949 2,00713 100840 7428 7428 754 151.71 151.71	20130 Canson-Canasa-Canas (d)     20130 Canson-Canasa-Cana (d)     20140 Canasa-Canasa (d)     20140 Canasa-C		labor
922000	ACAINA CENSALARES AA		SS4 - Corporate Communications SS4 - Corporate Communications	SS4 202111 SS4 20200	09900220	Labor Cost USD	Labor	0PER 20	121 820000 122 820000	Labor	340 Reputer Payroll - NJ PA Set) Reputer Payroll - NJ PA	2,777.19	5.443.88	2.667.13	723.82 Common-Company Come 001 5 199.83 Common Company Come 001		labor labor
923000	Admits CENSALARES AA Admit Censalares AA Admit Censalares AA Admit Censalares AA Mic Censela, Software AA		SIS4 - Corporate Communications	\$54 202206	09900330	Labor Cost USD	Labor Contractor #540439-CC Environme Euro #1526439-CC Contractor 221943 Contractor #53877-00	0FER 20 0FER 20	920000	Labor	340 Reputer Payroll - NJ PA	4.987.28	3.525.75	1.008.83	452.7 Common-Company Come 001		labor
930200	MSC GENERAL EXPENSE AA	0	SIS4 - Corporate Communications	S54 202110	09900230	Purchase Incident LS (KELLY CONLEXY-CANIN, ED/07-0008911	Contractor #540439-CC	OPER 20	121 930200	Non-Labor	020 Professional Services AP	258.92	251.26	74.28	23.4 Common-Company Come 001	6645	CORP CREDIT CARE not CAT A
900200	MSC GENERAL EXPENSE AA	8	SIS4 - Corporate Communications	554 202206	09900330 09900330 09900330 09900330	Purchase Incluse LE Residenting Landon Park	Labor Contractor 8540439-CC Environme Evr. 9135439-CC Contractor 221943 Contractor 453677-00 Contractor 7319	OPER 20	122 830200	Non-Labor	020 Professional Services AP	750	\$20.21	151.71	68.08 Common-Company Come 001	6445 6445 1803 110126 98241	LIGAMOCATHERN DI LIGAMOCATHERN DI TEAMWORLD NC
930200	MSC GENERAL EXPENSE AA	00	SIS4 - Corporate Communications	554 202204	09900330	Purchase invoices LIS Aulata Company Story Management Purchase invoices LIS Work for We are Aelata Initiative	Contractor 453677-00	OPER 20	122 930200	Non-Labor	000 Professional Services AP	755	530.21	151.71	68.08 Common-Company Come 001	110126	TEAMWORLD NC NOL CAT A HELVETICKAINC NOL CAT A
920000	ADMINIL GENISALARIES AA	8	SIS4 - Corporate Communications	S54 202111	09900330 09900331			OPER 20	321 \$20000	Labor	020 Professional Services AP 340 Regular Payroll - NJ PA	8.515. 5.002.0	6.019.08	1.051.88	473.06 Internal Company Commu 001	196451	HELVETICKAINC ROLOAT A
920000	ADMINA GENSALARES AA	00	S54 - Corporate Communications	S54 202201	09900331	Labor Cost USD	Labor	OPER 20	122 820000	Labor	340 Regular Payrol - NJ PA	3,812,1	2.094.97	771.11	565.02 Internal Communic Communication		labor
923000 923000 923000	ADMINE GENSALARES AA	0	SS4 - Corporate Communications	554 202200	09900331	Labor Cost USD	Labor Labor Labor	OPER 20	322 \$20000	Labor	S40 Regular Payroll - NJ PA	6,713.79	4,766.31	1,358.06	609.42 Internal Company Commu 001		labor
923000 921000 921000 921000 921000 921000 921000	ADDRESSANDSON AD	0	S54 - Corporate Communications S54 - Communications	558 202201 558 202203 558 202203 558 202203 558 202203 558 202203 558 202203 558 202203 558 202113	09600331 09600331 09600331 09600331 09600331 09600331 09600331 0960035 0960035	Land Califold Partian Instant ID (Perk ACCISCIDNARD)(CC) ARD) Partian Instant ID (Perk ACCISCIDNARD)(CC) ARD) Partian Instant ID (Perk ACCISCIDNARD)(CC) ARD)	Labor Employee Eap 9031439-CC	0PER 22 0PER 22 0PER 22 0PER 22 0PER 22 0PER 22 0PER 22 0PER 22	122 920000 122 921000	Labor Nond abor	340 Reputer Payroll - NJ PA	2,852.1 5,984.4 6,712.79 6,600.25 207.09 207.09 1902.04 7,162	2,004,57 2,005,57 3,005,51 4,706,25 4,002,59 148,4 148,4 148,4 148,4 148,4 158,50 5,013,26	15121 122241 106188 77111 10887 152600 134281 4159 4159 23691 1,42217		64.65	LORP OREDIT CARE INTO CATA INTO CONTRADE INTO CATA INTO CATA INTO CATA INTO CATA
921000	OFFICE SUPPLIES & EXPENSES AA	8	SIS4 - Corporate Communications	S54 202200	09900331	Divertisana Burelowa 110 DANA ANDERSON ABRZON COM/GNI/702093	Environe Euro 9135439-CC	OPER 20	921000	Non-Labor	235 Employee Misc Expenses AP	207.09	148.4	41.89	12.8 Internal Commence Commence (005	6445 6445	CODD COCDUT C ADP NOT CAT A
930200	MSC GENERAL EXPENSE AA	0	S54 - Corporate Communications S54 - Communications	S54 202110 S54 202110	09906675	Labor Cost USD	Labor	OPER 20	221 930200 221 930200	Labor	340 Reputer Payroll - NJ PA	192.84	124.98	29.91	17.95 Corporate ECP Pandemic 001 688.52 Corporate ECP Pandemic 201		labor Jabor
930200 930200 909000	MSC GENERAL EXPENSE AA	0	954 - Corporate Communications	558 202110 558 202110 558 202209	09906675 06805029		Labor	OPER 20 OPER 20	221 930200	Labor	340 Reputer Payroll - NJ PA	4,152,51 405,4	2.905.27	1,482.17	286.29 Corporate ECP Pandemic 001 286.29 Corporate ECP Pandemic 001 465.4 OR Adv for Conservation 001		labor
909000	MIC CENERGE LEVENCE AN MIC CENERGE LEVENCE AN INFO AND INSTRUCT ADVISET SAP NFO AND INSTRUCT ADVISET SAP OR	ap (0)		S54 202209	06805029	Mar Annual Sector	Labor	0PER 20	202         NORMA           202         NORMA           203         NORMA           203         NORMA           204         NORMA           203         NORMA           204         NORMA           203         NORMA           204         NORMA           205         NORMA           206         NORMA           207         NORMA           208         NORMA           209         NORMA           201         NORMA           202         NORMA           203         NORMA           204         NORMA           205         NORMA           206         NORMA           207         NORMA           208         NORMA           209         NORMA           201         NORMA           202         NORMA           203         NORMA           204         NORMA           205         NORMA           206         NORMA           207         NORMA           208         NORMA           209         NORMA           200 <td>Nert-Libor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Nart-Labor Narbar Narbor Narbar Narbor Narbor Narbar Na</td> <td>340 Result Panoli - NJ PN 340 Result Panoli - NJ PN</td> <td>455.4</td> <td></td> <td></td> <td>465.4 OR Adv for Conservation 001</td> <td></td> <td>labor Isbar</td>	Nert-Libor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Labor Nart-Labor Narbar Narbor Narbar Narbor Narbor Narbar Na	340 Result Panoli - NJ PN 340 Result Panoli - NJ PN	455.4			465.4 OR Adv for Conservation 001		labor Isbar
909000 909000 909000 909000 909000	INFO AND INSTRUCT ADVERTISIP INFO AND INSTRUCT ADVERTISIP	60	size - Corporate Communications 954 - Corporate Communications	554         202200           558         202209           558         202201           558         202205           558         202205           558         202206           558         202206           558         202206           558         202206           558         202206           558         202206           558         202206           558         202207           558         202206	OblicSc28 OblicSc28 OblicSc28 OblicSc28 OblicSc28 OblicSc28 OblicSc28 OblicSc28 OblicSc28	Parchase Incides Life Connections	Labor Comacter 221966 Comacter 211928 Comacter 211928 Comacter 211928 Comacter 21922 Comacter 2021 Vaucher 7500 Vaucher 7500 Comacter 20451 Comacter 20451	0PER 22 0PER 22 0PER 20 0PER 20 0PER 20	102 909000	Non-Labor	240 Headure Ventor No. 199 240 Readure Ventor No. 199 000 Productional Services AP 000 Professional Services AP 000 Professional Services AP 000 Professional Services AP 010 Professional Services AP 010 Professional Services AP 000 Professional Services AP	669.0 135			Billio         OH Ally SD Collisit/salaciti. 001           Millio         OH Ally SD Constraintian. 001           SD.         OH Ally SD Constraintian. 001	1803 1803 1803 6668 2015 2015 2015 6668	LISAMOCATHEEN DI GATA LISAMOCATHEEN DI GATA LISAMOCATHEEN DI GATA LISAMOCATHEEN DI GATA NATONIA (DI GATA HINNIA ASSOCIATE GATA
909000	INFO AND INSTRUCT ADVERTIEXP OR	60	SIS4 - Corporate Communications	954 202111	06805029	Purchase Invoices LS Connections customer messivilier Oct 2001	Contractor 211908	OPER 20	2/1 909000	Non-Labor	000 Professional Services AP	97.5			97.5 OR Adv for Conservation 001	1803	LISAMOCATHREN DI GATIA
909000	INFO AND INSTRUCT ADVERTISAP OR	60	S54 - Corporate Communications	S54 202205	06805028	Purchase invices LD weekome email server header wheeh	Contractor 221622 Contractor 77011	OPER 20	22 909000 22 909000	Non-Labor	COD Professional Services AP	2,435			2.435 OR Adv to Conservation 001	1803	NATIONAL COLOR GLOAT A
909000	INFO AND INSTRUCT ADVERTISIP OR INFO AND INSTRUCT ADVERTISIP OR INFO AND INSTRUCT ADVERTISIP OR INFO AND INSTRUCT ADVERTISIP OR	60	SIS4 - Corporate Communications	554 202202	06805028	Doorhaas Incrites 16 OR CAT ADSMDB Issuet	Voucher 75603	OPER 20 OPER 20 OPER 20	909000	Non-Labor	\$15 Printing AP	45. 2.435 1.528 10.436.27			1.529. OR Adv for Conservation 001	6968	NATIONAL COLOR G CATA
909000	INFO AND INSTRUCT ADVERTISAP OR	60	S54 - Corporate Communications	554 202206	06805028	Hurdhaae Invoices Ed. CHC ALA ACTIVE The defeater calcitioner commitmedia. Parchaee Invoices EG. CHC ALA ACTIVE To defeater calcitioner commitmedia.	Contractor 29651	OPER 20	22 909000 22 909000	Non-Labor	200 Professional Services AP	12466.27			17125 OR Adv to Conservation 001	2015	
909000 909000	INFO AND INSTRUCT ADVERTIDIP OR INFO AND INSTRUCT ADVERTIDIP OR	60	SIS4 - Corporate Communications	\$54 202207	06805029 06800320	Puechase Inclose US US-Tax-USPOR-SALES	Contractor 77221	OPER 20 OPER 20	909000	Non-Labor	CUO Protessional Services AP					0900	NATIONAL COLOR GLOAT A
909000	INFO AND INSTRUCT ADVERTIDIP OR	60	SIS4 - Corporate Communications SIS4 - Communications	S54 202205 S54 202140	06800220	Investory USD Manual Issues Depthicae Investory USD Social Marka Contrasts and Education	Sibberial Contractor 1218	OPER 20	122 909000	Non-Labor Non-Labor	415 Material Issues N 000 Dordessional Geneires AD	54.54	1.049.07	202.43	564.54 Or - Company Communic 001 139.6 Customer Education Georg 001		NREE ELLIS CATA CATA CATA MREE ELLIS CATA
930200 930200 930200 930200 930200	MGC GENERAL EXPENSE AN MGC GENERAL EXPENSE AN MGC GENERAL EXPENSE AN MGC GENERAL EXPENSE AN MGC GENERAL EXPENSE AN	60	S54 - Corporate Communications	554 2021193 554 202112 554 202202 554 202205 554 202205 554 202208	09905370	Microlaneous Transac SJ:00 RCCH inv M00410864525 109-RCCH		0PER 20 0PER 20 0PER 20	90000	Non-Labor	\$15 Printing PA	1.500 300.21 1.500	1.069.97 258.44 1,060.43 12.6 1.060.43	76.41	34.36 Customer Education Gene 001		CATA
930200	MSC GENERAL EXPENSE AA	0	SIS4 - Corporate Communications	S54 202202 S54 202202	09905370	Purchase Involues LS Social Media Durchase Involues LS Social Media Durchase Involues LS Involution Control Co	Contractor 1370	0PER 20 0PER 20 0PER 20	122 930200 122 930200	Non-Labor Non-Labor	COO Professional Services AP 100 Dodessional Services AP	1,500	1,060.43	303.42	136.15 Customer Education Gene (001 1.12 Customer Education Gene (001	104162	MINE ELLIS CAT A
930200	MSC GENERAL EXPENSE AA	60	S54 - Corporate Communications	\$54 202208	08665170 09665170 09665170 09665170 09665170 09665177 09665177	Purchase incides LE Social media customer outreach and education	Voucher Contractor 1320 Contractor 9239439-CC Contractor 5460 Contractor 5460	OPER 20	930200	No.L.Mar. No.L.Mar. No.L.Mar. No.L.Mar. No.L.Mar. No.L.Mar. L.Mar	415 Material Research COD Professional Services AP- 915 Printing Ph. COD Professional Services AP- COD Professional Services AP- COD Professional Services AP- COD Professional Services AP- Sel0 Resulter Payroll - NJ Ph. 360 Resulter Payroll - NJ Ph.	1500	1.060.43	12043 3844 200 200 200 200 200 200 200 2	MALA DE-CONDUCT CONSULT: 00     Mala DE-CARANTE CONSULT:	104192 6445 104192 104192	MARE ELLES ONT A ONT A MARE ELLES ONT A CORP OSEDIT CARE not CAT A MARE ELLES ONT A
930200	MEC GENERAL EXPENSE AL MEC GENERAL EXPENSES AL OFFICE SUPPLIES & EXPENSES AL	00	S54 - Corporate Communications	556 202209 556 202110 556 202205	09905370	Distributes inviting ID Social media customer subsach and education	Contractor 5465	OPER 20 OPER 20 OPER 20 OPER 20	122 830200	Non-Labor	020 Professional Services AP	1,500, 71,26 71,26	1.060.43 49.08 50.38	303.42	136.15 Customer Education Gene 001	104192	MRE ELLIS CAT A
921000	OPTICS SEPRET ADVISION         Annotation           OPTICS SEPRET ADVISOR         Annotation           OPTICS SEPRE ADVISOR         Annota	60	SIS4 - Corporate Communications	554 202205	09905107	Concernent III Good andle pasterer alvede high de datable     Lande Caractilo     Lande     Lande	Labor	OPER 20	122 921600	Labor	343 Regular Payrol - NJ PA	71.26	50.38	54.41	6.47 Telecon Services 001		labor
921000 921000 921000 93000 91000 91000	OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA OFFICE SUPPLIES & EXPENSES AA ADMINI EENSALARES AA	0	S54 - Corporate Communications	SE4         202111           SE4         2020112           SE4         202071           SE4         202070           SE4         202070     <	09805107 09805107 09805107 09805107 09800708 09800730	Labor Cost USD	Labor	0PER 20 0PER 20 0PER 20 0PER 20 0PER 20 0PER 20 0PER 20	321 821600	Labor	Jabo Require Payroli - NJ PA Jabo Require Payroli - NJ PA	71	40.00 49.00 453.02 1200.00 2253.9	54.75	6.63 Telecon Services 001		labor
921000	OFFICE SUPPLIES & EXPENSES AA	8	SIS4 - Corporate Communications	SS4 202112	09905107	Labor Cost USD	Labor	OPER 20	121 921600	Labor	343 Regular Payrol - NJ PA	71.26	49.88	54.75	6.63 Telecon Services 001		labor
920000	ADMINIA GENISALARES AA	8	SIS4 - Corporate Communications	554 202207 554 302307	09907095	Later Cost USD	Labor	OPER 20	122 920000 122 920000	Labor	343 Regular Payrol - NJ PA 343 Regular Payrol - NJ PA	641.52 1570.44	453.52	129.77	58.23 Exela Billing Outage 001 583.25 Common Salar and Marke 001		labor labor
910000	CLIST SVC & NFO EXP-MISC AA CLIST SVC & NFO EXP-MISC AA	0	SIS4 - Corporate Communications	S54 202112	09900730	Labor Cost USD	Labor	OPER 20	910000	Labor	340 Regular Payrol - NJ PA	2509.44 4320.88	2253.9	1476.23	590.75 Common Sales and Marke 001		labor
91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000 91000	CLET SVC & NFO EXP-MISC AA CLET SVC & NFO EXP-MISC AA CLET SVC & NFO EXP-MISC AA CLET SVC & NFO EXP-MISC AA	8	SIS4 - Corporate Communications	554 202201 554 302307	04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660730 04660735 04666075 04666075 04666075 04666075	Later Cost USD	Labor	OPER 20	122 910000 122 910000	Labor	abil Bageir Papel:         120           bil Sangair Papel:         120           bil Sangair Papel:         120           bil Schmitzer Barbartsmar Barbartsmar         120           bil Schmitzer Barbartsmar         120           bil Schmitzer Barbartsmar         120           bil Schmitzer Barbartsmar         120           bil Schmitzer Arbartsmar         120           bil Schabertsprinter         120	274.11 40119 8750 8752 119888.80 19888.80 8654.4 2416 25 25	10000 20 10200 40 4556 4555 50 1054 50 1054 50 1056 50 1000 1000 1000 1000 1000 1000 1000 1	1272.49 5487.00	556.54 Common Gales and Marke (01) 581.44 Common Sales and Marke (01)		labor labor
910000	CUST SVC & NFO EXP-MSC AA	0	SIS4 - Corporate Communications	\$54 202209	09900730	Durchase Inscises 16: 02:VOC	Labor Contractor 34009 Environae Dev 8540439-CC Contractor 8556439-CC Contractor 11-048710 Voucher 9125439-CC	OPER 20	910000	Non-Labor	000 Professional Services AP	8750	4564	2997.84	1188.16 Common Gales and Mexico 001	994423 6445 27288 6445 111218 6445	MDC RESERRCH CODE DECHT CAD T NE CAT A CODE DECHT CAD T NE CAT A VEDNIT AND CAL AND NE CAT A ALCALLE INC. NE CAT A CODE CEDIT CARE NE CAT A
910000	CLIST SVC & NFO EXP-MISC AA CLIST SVC & NFO EXP-MISC AA	8	SIS4 - Corporate Communications	SS4 202110 SS4 202111	09900730	Distribute invities 16 KELLY CONLEY-MEET US 2005/2000 Distribute invities 17 Const With unsure	Environan Erw (85603)-CC Contractor 493562 Voucher 8056439-CC Contractor 11-048750 Voucher 915439-CC Voucher 915439-CC Voucher 9554 Voucher 9554 Voucher 9554 Voucher 9554 Voucher 9554	OPER 20 OPER 20	221 910000 221 910000	Non-Labor Non-Labor	235 Employee Misc Expenses AP (10) Divises innel Services AD	873.28	455.53 59987.44	298.36	119.39 Common Gales and Marke (01 10722 8 Common Sales and Marke (01	6445 122008	VEDINT ANEDING IS INVECTION
910000	CLET SVC & NFO EXP-MSC AA CLET SVC & NFO EXP-MSC AA CLET SVC & NFO EXP-MSC AA	8	SIS4 - Corporate Communications	S54 202111	09900730	Desthana Intrinee 16 DANA ANDERSON ABRZON COM JURCH220	Voucher 8656439-C/C	OPER 20	910000	Non-Labor	822 Customer Activities AP	3000	1554.89	1024.95	410.16 Common Gales and Marke (00)	6445	CODE CECHT CHEF INT CAT A
910000	CLIST SVC & NEO EXP-MISC AA	8	SIS4 - Corporate Communications	SSA 202112 SSA 202200	09900730	Purchase Indices to Securit AND RECOVERY SUPPORTED AND A SECURITY OF A S	Voucher 9135439-CC	0PER 20	22 910000	Non-Labor	EIIS Macelaneous AP	9004.4	1264.51	896.27	355.22 Common Sales and Marke 001	6445	CORP CREDIT CARE INSI CAT A
910000	CUST SVC & NPO EXP-MSC AA CUST SVC & NPO EXP-MSC AA	8	SS4 - Corporate Communications	554 202204	09900730	Micolinecus Tomas 1000 403-PETAL Macolinecus Tomas 4007 4077-8	Voucher	OPER 20	222 910000 122 910000 122 910000 122 92000 123 909000 122 920000	Non-Labor	BIS Macelaneous PA	25	13.04	8.57	3.39 Common Sales and Marke 001		not CAT A
929100	CLETISVC & NEO EXPLANC AA EMPLOYSE PENSIONS & BEINEFITSIN AA INFO AND INSTRUCT ADVERT EXP ADMINI & GENISALARES AA	8	SIS4 - Corporate Communications	554 202209	09902811	Purchase involves LE Executive coaching for Dana Anderson	Voucher 9564 Voucher 28199	OPER 20	322 826102	Non-Labor	BIS Miscelaneous AP	6000	4241.7	1213.68	544.62 A and G Common Training 001	108098 2015	DELANEY & ASSOCIA INSICAT A
909000	INFO AND INSTRUCT ADVERTIENP OR ADAMN & CENISALADES AA	8	SIS4 - Corporate Communications	SS4 202110 SS4 202006	06805154	Purchase invoices LS Aug. Rates Oregon customer notice newspaper ad placement labor const USD	Voucher 29199	OPER 20 OPER 20	121 909000 122 920000	Non-Labor Labor	510 Advertising Expenses AP Set) Require Panol - N I DA	8813.98 595.95		100.65	6610.96 Customer Education Ops 001 54.09 Workshore 2022 001	2015	HANNA & ASSOCIATE NOLCAT A
920000	ADMINIL GENISALARIES AA		SIS4 - Corporate Communications	S54 202112	09905690	Labor Cost USD	Labor	OPER 20	121 920000	Labor	343 Regular Payrol - NJ PA	6000 8810.58 555.55 220.65 120 9.99 9.99	154.45 84 7.05	45.67	20.53 Company Utility Initiatives 001		RE CALLA RE CATA RECATA ELLANEY & ASSOCIPT RE CATA HANNA & ASSOCIPT RECATA MORE HANNA & ASSOCIPT RECATA MORE CODE OFFICIENT CAST RECATA
921000	OFFICE SUPPLIES & EXPENSES AA	8	SIS4 - Corporate Communications	SS4 202110 SS4 202014	09900015	Distribute Invites ID: KELLY CONLEY-CHO WWW STOCKPHOTO.COM Distribute Invites ID: DAMA ANTOPOTONIUUU STOCKPHOTO.COM	Voucher 8540439-CC	OPER 20 OPER 20	221 921000 222 921000	Non-Labor Non-Labor	915 Printing AP 935 Subacciptions AD	120	200	24.83	11.17 VanderBrowen Gunnouth 005 0.61 VanderBrowen Support 001	6445	CORP. OPENIT CAPP. INSI CAT A
822000 821000 821000 821000 821000 821000 821000 821000 821000 821000 821000 821000	ADMINE GENSALARES AA OFFICE SUPPLES & EXPENSES AA OFFICE SUPPLES & EXPENSES AA OFFICE SUPPLES & EXPENSES AA OFFICE SUPPLES & EXPENSES AA		SI54 - Corporate Communications	S54 202200	09900015	Development (F) US-Tax-OFFSPOK-OFFSET-OFFSET	Labor B49439-CC Vaucher 849439-CC Vaucher 930000115077 Vaucher 9100000115077 Vaucher 9100000115077 Vaucher 920439-CC Contractor 9200439-CC Contractor 2020-403 Contractor 9203439-CC Vaucher 920349-CC Vaucher 920	OPER 20	122 921000	Non-Labor	COO Professional Services AP	0	0		UsediariDrovenia Gunovetić 005	6445 6445 1107022 6445 20886 20886 6445 6445 6445 6445 6445	INTRADO DIGITAL ME INTO CATA NITRADO DIGITAL ME INTO CATA NITRADO DIGITAL ME INTO CATA
921000		8	SIS4 - Corporate Communications	SSA 202203 SSA 202203	09900015	Parchase Invices Line UNIV. NOLEXCLUM HILL SECRETARIAN INVIDUATION PROCESSION INVIDUATION INFORMATION INFORMATIONI INFORM	Contractor 1000000117648	OPER 20	22 821000 22 821000	Non-Labor	COD Professional Services AP	0 379.29 9.09 300 300	268.16	0	0 Vendar/Program SupportS 001	110102	INTRADO DIGITAL ME not CAT A
921000	OFFICE SUPPLES ADDENDES AN OFFICE SUPPLES ADDENDES AN OFFICE SUPPLES ADDENDES AN OFFICE SUPPLES ADDENDES AN	8	S54 - Corporate Communications	554 202204	09900015	Purchase Invites LS: DANA ANDERSONTHE SPONESMAN REVEW	Voucher \$256439-CC	OPER 20	122 921000	Non-Labor	935 Subscriptions AP	9.99	7.06	2.02	0.91 Vendor/Program Support\$ 001	6445	CORP CREDIT CARE not CAT A CUTRWIN' MEDIA not CAT A CUTRWIN' MEDIA not CAT A CUTRWIN' MEDIA not CAT A CORP CREDIT CARE not CAT A CORP CREDIT CARE not CAT A CORP CREDIT CARE not CAT A
921000	OFFICE SUPPLIES & EXPENSES AA	0	SIS4 - Corporate Communications	\$54 202205	09900015	Purchase indices LE Minda monitoring	Contractor 2021-073	OPER 20	921000	Non-Labor	000 Professional Services AP	300	212.09	60.68	27.23 Vendor/Program SupportS 001	22096	CUTAWAY MEDIA not CAT A
921000		8	SIS4 - Corporate Communications SIS4 - Corporate Communications	S54 202205 S54 202209	09900015	Purchase Involues LS DANA ANDERSION THE SEVEN AND REVENUES AND ADDRESS AND ADDRESS AND ADDRESS AND ADD	Voucher 9379439-CC Voucher 9529439-CC	OPER 20 OPER 20	222 921000 222 921000 222 921000	Non-Labor Non-Labor	935 Subscriptions AP 935 Subscriptions AP	100.95 9.99 3.00	77.73	22.24	9.98 Vendor/Program SupportS 001 0.91 Vendor/Program SupportS 001	6445	CORP CREDIT CARE INST CAT A CORP CREDIT CARE INST CAT A
921000	OFFICE SUPPLIES & EXPENSES AA	00	SIS4 - Corporate Communications	S54 202208	09900015	Purchase Inociose LE Mada monitoring	Voucher 2022-037	OPER 20	122 921000	Non-Labor	\$35 Subscriptions AP	300	212.09	60.68	27.23 Vendor/Program SupportS 001	22096	CUTAWAY MEDIA INST CAT A
92000	ADMINE GENSALARES AA		sure - Corporate Communications SS4 - Corporate Communications	554 202209	09900330	Labor Cost USD	Voucher 9749439-C/C Labor	0PER 20	122 82000	Labor	Seb Regular Payrol - NJ PA	415.0	2903.02	839.22	276.6 Crammon Comman Come (20)	646	INDE RECOT AND RECAT A
920000	ADMINE GENERALARIES AA	8	954 - Corporate Communications	S54 202112	09900230	Labor Cost USD	Labor	OPER 20	221 920000	Labor	343 Regular Payrol - NJ PA	2109.26	1476.44	436.51	196.31 Common/Comman Come 001		labor
920000	ACMINA GENSALARES AA	18	SS4 - Corporate Communications	554 202206	09900330	Labor Cost USD	Labor	OPER 20	122 920000	Labor	343 Regular Payroll - NJ PA	3719.68	2629.63	752.42	237.63 Common Commany Come Opt		labor
821000 822000 822000 822000 822000 822000 822000 822000 822000 822000 822000 822000	CH-LS SUPPLIES ENDINEES AN COTPUS SUPPLIES ENDINEES AN ADMIN CONSULVES AN	8	sist - Corporate Communications SS4 - Corporate Communications	554 202202	09900330	Bit	Labor Labor	OPER 20 OPER 99	222 821005 232 820005 231 820005 232 820005 232 820005 232 820005 232 820005 231 820005 231 820005	Labor	343 Hagular Payrol - NJ PA 340 Regular Payrol - NJ PA	425.6 414.8 214.8	200, 14 7, 00 7, 00 22, 00 77, 73 71, 20 20, 20	790.36 1189.71	535.05 Common-Company Come (0)		labor Jabor
920000	ADMINE GENERALARIES AA	8	954 - Corporate Communications	554 202205	09900230	Labor Cost USD	Labor	OPER 20	122 920000	Labor	343 Regular Payrol - NJ PA	9020.6	6094.34	1742.78	782.48 Common-Company Come 001		labor
920000	ADMINE GENSALARES AA		sure - Corporate Communications SS4 - Corporate Communications	554 202202	09900330	Laber Cost USD	Labor	0PER 20	122 ¥20000	Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	#423.08 3524.31	2491.51	712.9	318.9 Common-Company Come 001		abor labor
920000	ADMINE GENERALARES AA ADMINE GENERALARES AA ADMINE GENERALARES AA MEC GENERAL DIFERES AA MEC GENERAL DIFEREE AA	0	SS4 - Corporate Communications	554 202201 554 3000m	09900220	Labor Cost USD	Labor	0PER 20	222 82000 122 82000 122 82000 122 82000 122 82000 122 82000	Labor	343 Regular Payrol - NJ PA Skit Regular Payrol - NJ PA	2306.03	1630.25	466.47	209.31 Common-Company Come 001 2214.52 Common Company Come 221		labor labor
930200	MSC GENERAL EXPENSE AA	co.	SS4 - Corporate Communications	S54 202204	09900230	Purchase involves LBL EID refresh of internal materials and collateral	Contractor 221928	OPER 20	122 \$30200	Non-Labor	000 Professional Services AP	1500	1060.43	303.42	136.15 Common-Company Come 001	1803	LISAMOCATHREN DI NOLOTA
920200	MILC LANERAL EXPENSE AA ADMINA GENISALARES AA	8	sist - Corporate Communications SS4 - Corporate Communications	554 202202	09900330	Labor CHISD	voucher Labor	OPER 20 OPER 99	222 \$20000 222 \$20000	Non-Labor Labor	1413 Histing PA 340 Regular Payrol - NJ DA	6.63 #796.94	3.27 9199.07	0.94	1.62 Common Common Common (05 792.08 Internal Common Common (05		CAT A MOO
923000	ADMINA GENSALARES AA		SIS4 - Corporate Communications	S54 202207	09900321	Labor Cost USD	Labor	OPER 20	920000	Labor	SHO Regular Paynol - NJ PA	3873.63	2738.45	783.56			CAT A Bibor Bibor Bibor
200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000 200000	MEC GENERAL EXPENSE AN MEC GENERAL EXPENSE AN ACMINA CENSALARES AN		Del Del Construction         Description           Del Del Del Construction         Des		BARGON T-1     B	Kancer Start Free Barbane Barb	Water         202-337           Vacaber         Fieldab-CC           Laker         Fieldab-CC           Constance         22-5952           Constance         22-5952           Constance         22-5952		122 ¥20000	Labor	005         Science option         PP           005         Science option         PP           305         Science option         PP <td< td=""><td>4.63 8784 31 8006 32 6006 32 6006 32 8000 327.79 9007 6 9007 6 9000000000000000000000000000000000000</td><td>6 1900 (CT 2720, 44 6453, 77 2874 (J) 605 26 605 26 605 26 605 26 204 26 204 26 766, 16 2664, 34 2664, 34</td><td>10255 4456 200 00 00 00 00 00 00 00 00 00 00 00 00</td><td></td><td></td><td>abor labor</td></td<>	4.63 8784 31 8006 32 6006 32 6006 32 8000 327.79 9007 6 9007 6 9000000000000000000000000000000000000	6 1900 (CT 2720, 44 6453, 77 2874 (J) 605 26 605 26 605 26 605 26 204 26 204 26 766, 16 2664, 34 2664, 34	10255 4456 200 00 00 00 00 00 00 00 00 00 00 00 00			abor labor
920000	ACMINE GEN SALARIES AA	8	SS4 - Corporate Communications SS4 - Corporate Communications	554 202209 554 9000~	09900331	Purchase Invoices LS: View design Decrement Invoices LS: View design	Lator Contractor 22-0023 Contractor 22-0106 Contractor 22-0411 Emoloyee Roz E17424521 Contractor 25001 Contractor 25013	OPER 20	122 920000 129 920000	Non-Labor Non-Labor	000 Professional Services AP 000 Professional Services	900	636.26	182.05	81.69 Internal Company Commu 001	100754 100754 100754 90554 2015 2015	DEATINE CATCH ST not CAT A CREATINE CATCH ST not CAT A CREATINE CATCH ST not CAT A CREATINE CATCH ST not CAT A Smith, Brandon R not CAT A HMNN & ASSOCIATE not CAT A HMNN & ASSOCIATE not CAT A
920000	ADMINE GEN SALARES AA	18	SS4 - Corporate Communications	S54 202205	09900331	Purchase Inscises LE: View design	Contractor 22-0411	OPER 20	322 \$20000	Non-Labor	COO Professional Services AP	900	636.25	182.05	81.69 Internal Company Commu 001	100754	CREATINE CATCH ST INSECAT A
921000 923000	OUTSDE SERVICES EMPLOYED AN	20 20	504 - Corporate Communications 554 - Corporate Communications	554 202208 254 202209	09900331	Hundhale Inscise Lts: Antwe, For Unwambroe conference Purchase Inscises LtS: Services brochure for Asiata's finiticate citric.	Employee Exp IE 17424501 Contractor 29901	OPER 20 OPER 20	322 821000 322 823000	Non-Labor Non-Labor	200 Autore AP 000 Professional Services AP	217.19 257.5	224.96 252.73	64.16 72.32	28.79 Internal Company Commu 001 32.45 Internal Company Commu 001	90524 2015	smith, wrandon R not CAT A HANNA & ASSOCIATE not CAT A
923000		8	954 - Corporate Communications	S54 202209	09900231		Contractor 29813	OPER 20	122 923000	Non-Labor	000 Professional Services AP	1080.75	766.15	219.22	98.37 Internal Company Commu 001	2015	HANNA & ASSOCIATE NOT CAT A
900200	MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA		954 - Corporate Communications	S54 2022**	09906675	Labor Cost USD	Labor	0PER 20	AA 1 WALADD 222 930200	Labor	340 Regular Paytol - NJ PA 340 Regular Paytol - NJ PA	4092.6 514.6	2004.16	103.49	48.43 Concents ECP Pandemic 001		MDor Mbor
909000	INFO AND INSTRUCT ADVERTIBUT OR	e e	SIS4 - Corporate Communications	S54 202207	06805029	Labor Cost USD	Labor	OPER 20	22 80200 22 80600 22 80600 22 80600	Labor	SHO Regular Paynol - NJ PA	342.18			342.18 CR Adv for Conservation 001		labor
909000	MIC CORREPAT, REPAIRS AN MIC CORREPAT, REPAIRS AN MIC CORREPAT, REPAIRS AN MIC CORREPAT, REPAIRS AN MIC CORREPAT, REPAIRS AND AN INSTRUCT ADDRET SAP AND		sure - Corporate Communications SS4 - Corporate Communications	S54 202110	06805028	Ale Contos La Contos	Labor Labor Voucher 7x538 Oormacter 9668509 Voucher 75555 Cortisacter 77281 Contracter 77281 Contracter 77281 Voucher Voucher Labor Labor	0PER 20	221 909000	Non-Labor	340 Regular Paynoli - NJ PA 340 Regular Paynoli - NJ PA 340 Regular Paynoli - NJ PA 615 Printing PA 000 Professional Services AP	443.8 2435			2435 OR Advitor Conservation 001	8968	METONIA COLOR G. CATA GETTY AMODELLAS CATA METONIA COLOR G. CATA METONIA COLOR G. CATA NOTONIA COLOR G. CATA CORP CREDIT CARE. INT ONT A
909000	INFO AND INSTRUCT ADVERTIDAP OR	00 00	SS4 - Corporate Communications	S54 202112 S54 3000m	06805029	Durchwas Inucines I/P. Connections customer newslatter images Durchwas bunches I/P. Connections Austriates	Contractor 19608509 Weather 25909	0PER 20	221 909000 222 909000	Non-Labor Non-Labor	COD Professional Services AP 615 Drieting	120			120 OR Adv for Conservation 001 2015 OR Adv for Conservation 201	111821	NATIONAL COLOR GLOAT &
909000	INFO AND INSTRUCT ADVERTIENP OR	19	SS4 - Corporate Communications	554 202207	06805028	Purchase Invoices LS US-Tax - OFFSPCK-OFFSET	Contractor 77221	OPER 20	322 909000	Non-Labor	COD Professional Services AP 515 Printing AP COD Professional Services AP 515 Printing PA 515 Printing PA	2415			© OR Adv for Conservation 001	0000 1111821 0000 0000 6445	NATIONAL COLOR GLOAT A
930200 930200	MSC GENERAL EXPENSE AA MSC GENERAL EXPENSE AA	8	SIS4 - Corporate Communications SIS4 - Corporate Communications	554 202205 554 2022 <sup>44</sup>	09905370	Purchase Invoices LIS DANA ANDERSON-FACEBIK UR20VB/W72 Microlaneous Transic SU/09 RICCH Inv MI026420602X 109-RICCH	Contractor 9379439-C/C Voucher	OPER 20 OPER 99	222 930200 222 930200	Non-Labor Non-Labor	000 Professional Services AP 915 Printing DA	25 888 68	17.67 615.00	508 17558 20758 1445 1445 1445 1445 2322 118412 857 857 857 857 9427	2.27 Customer Education Gene 001 78.97 Customer Education Gene 1011	6445	CORP CREDIT CARE INST CAT A
930200	MSC GENERAL EXPENSE AA	0	SS4 - Corporate Communications	S54 202209	09905370	Miscelaneous Transac SJ:108 RICCH inv MI08472778625 109-RICCH	Voucher	OPER 20	122 930200	Non-Labor	\$15 Printing PA	1026.18	725.45	207.58	93.14 Customer Education Gene 001		CATA
921000 921000	OFFICE SUPPLIES & EXPENSES AN	20 20	504 - Corporate Communications 554 - Corporate Communications	554 202112 554 202202	09905107 09905107	Labor Cost USD	Labor Labor	OPER 20 OPER 20	227 921600 222 921600	Labor Labor	615 Printing PA 343 Ragular Paynol - NJ PA 363 Ragular Paynol - NJ PA	800.90 9026.10 71.26 71.26	49.88	54.75 54.41	6.47 Telecon Services 001 6.47 Telecon Services 001		labor labor
921000	OFFICE SUPPLIES & EXPENSES AA	8	SS4 - Corporate Communications	954 202204	09905107	Later Cent USD		OPER 20	322 921600	Labor	S40 Regular Payrol - NJ PA	71.26	50.38	56.41	6.47 Telecon Services 001		labor hiter
92000			SS4 - Corporate Communications SS4 - Corporate Communications	202111 554 202207	09907095	Laber Cost USD	Labor	0PER 20	41 827800 322 92000	Labor	340 Regular Payrol - NJ PA 340 Regular Payrol - NJ PA	71.26 164.62 3456.16	50.38 49.88 102.1 1802.38 13.06 13.06 13.06 201.02 34.88	29.22	12.1 Exela Billing Outage 001		labor labor labor not CAT A not CAT A not CAT A
910000	ADMINE GENERARDES AA CLEATEVICE NOT DEP-MEC AA CLEATEVICE NOT DEP-MEC AA CLEATEVICE NOT DEP-MEC AA CLEATEVICE NOT DEP-MEC AA	8	954 - Corporate Communications	554 202208	09900730	Labor Coll (100)         433-5627.04.           Microfensore Theorer 1(300)         433-5627.04.           Microfensore Theorer 1(300)         433-5627.04.           Microfensore Theorer 1(300)         433-567.04.	Labor	OPER 20	122 910000	Labor	340 Regular Paynol - NJ PA 340 Regular Paynol - NJ PA 685 Miscellaneous PA 685 Miscellaneous PA 685 Miscellaneous PA 340 Regular Paynol - NJ PA 640 Chatter Paynol - NJ	3458.16	1902.74	1184.12	400.3 Common Galax and Marke (0)		labor
910000	CUST SVC & NFO EXP-MSC AA	18	954 - Corporate Communications 954 - Corporate Communications 954 - Corporate Communications	554 202206	09900730	Lindo Unit (LE)     Kito allianous Tamase 1920     Kito Allianous     Kito allianous     Tamase 1920     Kito Allianou     Kito allianous     Tamase 1927     Kito Allianou     Kito     Kit	Voucher	OPER 20	222 910000	Non-Labor	BIS Macelaneous PA	82	13.06	8.57	3.39 Concerns Galax and Marke QC		not CAT A
910000 920000	CLIST SVC & NFO EXP-MISC AA ADMIN& GEN SALARES AA	8	S54 - Corporate Communications S54 - Corporate Communications	554 202207	09900730	BROWRING THEY 4G3-FETAL Labor Cont USD	voucher Labor	OPER 20 OPER 99	222 910000 222 920000	Non-Labor Labor	180 Miscelaneous PA 340 Regular Payrol - NJ DA	25 400 04	13.06 201.02	8.57 94.71	2.39 Common Sales and Marke 001 42.51 Workplace 2022 Non		not CAT A
923000			SIS4 - Corporate Communications	264 202111 264 202207 264 202208 264 202208 264 202205 264 202205 264 202207 264 202207 265 202208 264 202208 265 202208 265 202208 266 202208 267 202208 268 202207 268 202207 268 202207 268 202207 268 202207 268 202207 268 202207 268 202207 268 202207 268 202207 269 20208 268 202207 269 20208 268 202207 269 20208 269 20207 269 20207 200 200 200	09907055	Micelaneous Transic SJ:09 RICOH inv M0059999025 109-RICOH	Voucher Contraction Aufface	OPER 20	923000	Non-Labor	SriS Printing PA	49.05	24.68	9.92	4.45 Workplace 2022 001	00447	labor net CAT A
908000 908000	ADMINIA CENSALARES AA OLISEGE SERVICES EMPLOYED AA CLEIT SVC & NFO EXP-CUST AGST OR CLEIT SVC & NFO EXP-CUST AGST OR CLEIT SVC & NFO EXP-CUST AGST OR CLEIT SVC & NFO EXP-CUST AGST OR	90 00	USO - Limited Income USO - Limited Income USO - Limited Income USO - Limited Income	LID 202209 LID 202204	06805230 06805230	Hunchase Inscise Lts. Low income research Punchase Inscises LtS. Energy Burden Assessent	Contractor 34510 Contractor 747 Contractor 751	OPER 20 OPER 20	322 909040 322 909040	Non-Labor Non-Labor	Eris Printing PA COD Professional Services AP COD Professional Services AP COD Professional Services AP E24 Customer - Agency Paymer PA	400.24 40.05 2050 9457.5 1945.5			3.19 Common salate and same 000 4.251 Workplace 3022 000 4.45 Workplace 3022 000 93206 Ennoce Alteratability Act De 000 9575 5 Ennoce Alteratability Act De 000 1965 5 Ennoce Alteratability Act De 000 1965 5 Ennoce Alteratability Act De 000	99443 111558 111558	MDC RESEARCH EMPOWER DATAWC Low income EMPOWER DATAWC Low income Low income
908000	CLIST SVC & NFO EXP-CUST AGGT OR	80	USO - Limited Income	150 202204	06805230	Purchase Invoices LG: Energy Burden Assessment Neuroiness Terres Investment Assessment Research Con Assess Inter-	Contractor 751	OPER 20	22 908040	Non-Labor	000 Professional Services AP	8417.5			6417.5 Energy Affordability Act De 001	111558	EMPOWER DATAWE Low income
908000	CLIST SVC & NFO EXP-CLIST ASIT OR		USO - Limited Income	US0 202208	06805230	minumarman menan yemenge menagehitet Mogram Criedt Galt Cregon Avita Directione involven 145 Energy Burden Assessment	Voucher Contractor 759 Contractor 754	OPER 20	322 908040	Non-Labor	COD Professional Services AP	1145.5			2700 Energy Altertability Act De 001	111558 111558	ENDIVAICD NATIVAN' Low income
908000	CLIST SVC & NFO EXP-CLIST ASST OR	80	US0 - Limited Income	150 202205	06805230	Divertisana Inurrisma 140 Ratio Casto Antalgola Microdinana an Tananan Antalgola	Contractor 754 Muscher	OPER 20	122 908040 122 908040	Non-Labor Non-Labor	000 Professional Services AP 814 Customer - America Pro-	4810			4910 Energy Albertability Art Da (00) 55519 Energy Albertability Art D- 104	111558	ENDIVAICE NATIVANT Low income
908000	CUST SVC & NEO EXP-CUST ASST OR	38	USO - Limitad Income USO - Limitad Income	SEA         20211           SEA         202207           SEA         202206           SEA         202206           SEA         202207           SEA         202207           SEA         202207           SEA         202207           LED         202204	0066230 00662720 00662720 00662720 00662720 00662720 00662720 00662720 00662720 00662200 00662220 00662220 00662220 00662220 00662220	Mandama Taman Maran Maran Gala Taka Mandama Taman Kuri Suka Mandama Ma	Labor Labor Labor Wouther Usuther Labor Commacit Commacit Commacit Commacit Part Commacit Part Commacit Part Commacit Part Commacit Part Commacit C	0FRR 22 0FRR 22 0FR		Non-Labor         Sec. Labor           Labor         Labor           Rot-Labor         Labor           Rot-Labor         Rot-Labor           Rot-Labor         Rot-Labor           Rot-Labor         Rot-Labor           Rot-Labor	020 Professional Services AP 020 Professional Services AP 614 Controller Asservice Dasmar PA 614 Controller Asservice Dasmar PA 614 Controller Asservice Dasmar PA	2700 4810 5252.99 1293.16 623.34 5457.5			1912 Emiro Alfred Marakan Art No. 001 3200 Chaora Alfred Marakan Art No. 001 4815 Chaora Alfred Marakan Art No. 001 55539 Chaora Alfred Marakan Art No. 001 55231 Chaora Alfred Marakan Art No. 001 62234 Chaora Alfred Marakan Art No. 001		Exervació nativari Exervació nativari Exervació nativari Exervació nativari Exervació nativari Exervació nativari Exervació nativari Exervació nativari
				150 202207	06805230	Microlevon Trene Amarage Ideagement Program Cindt Gas Oregon Aviata	Voucher	OPER 20	908030	Non-Labor	614 Customer - Anenco Daumar PA 020 Professional Services AP	623.34			623.34 Energy Miturtability Art Da 001		Lowincome
0.0000 0.00000 0.00000 0.000000	CLEFTSIVE & MPC DEP-CLEFT AGET CLEFTSIVE & MPC DEP-CLEFT AGET CREFTSIVE AGET CREFTSIVE & MPC DEP-CLEFT AGET CREFTSIVE AGET CREFTSIVE CREFTSIVE CREFTSIVE CREFTSIVE CREFTS	8	US0 - Limited income	150 202206	06805230										5457.5 Enerry Miturtability &rt Da 005	111558	EMPANED NATION' Low income



October 2022 | Oregon

# Saving energy in style

A natural gas fireplace can add warmth and character to any room while helping save on heating bills. As a customer of Avista you could save up to \$250 on a natural gas fireplace with incentives from Energy Trust of Oregon.

Find eligibility details and local contractors at energytrust.org/fireplace or call (866) 368-7878.



# Connections



# In the Pacific Northwest, noticeably cooler outdoor temperatures typically arrive in October.

It's usually around this time that we can find ourselves surprised and even confused — when we open our energy bills, that's because during colder months, home heating can account for 40% to 60% of our monthly energy use. Here are a few things you can do to save energy this season:

- **Check your thermostat.** Reducing the temperature by just three degrees during cool months can result in energy savings of approximately 10%.
- Set your tanked water heater at no more than 120 degrees. When it's cold outside, water heaters use more energy to keep the water inside hot and can account for nearly 14% of monthly energy use.
- Swap out incandescent or CFL lightbulbs for energy efficient LEDs. LEDs use up to 90% less energy and can put out even brighter light than older lighting options – important, as daylight hours decrease.
- Seal cracks and gaps around doors and windows to reduce home heat loss. Removable rope caulk is a great option for temporary areas, while tube caulk and weatherstripping provide more permanent solutions.

Considering a large energy-efficiency project or upgrade? **Save money with** our rebates at myavista.com/getrebates.

Environmental Intervenors/325 Ryan/2



recently? Furnace filters help reduce dust, dander and dirt in your home, improving indoor air quality and helping you breathe easy. Clean filters matter because they can increase the efficiency and extend the life of your furnace, while also

Even though filters should be replaced regularly, it's easy to forget about them. Tell your furnace not to fret though—our Furnace Filter Reminder Program can help ensure you'll never forget to replace your filter again.

We offer two time-saving options to choose from:

reducing maintenance costs.

- 1. Our **home delivery** option provides convenience at a competitive price, delivering filters direct to your door.
- 2. Our **email reminder** option removes the guesswork from your replacement schedule by sending you an email every three months, reminding you to replace your filter.

Sign up today at myavista.com/changemyfilter.

## October is National Energy Awareness Month

Energy conservation is good for

**all of us.** Using energy wisely can help reduce costs and conserve our natural resources. And, no matter what type of home you live in, there are many ways to start saving energy now.

Visit myavista.com/tips for energy saving ideas, simple how-to DIY videos, our online Energy Use Guide and more.

# Convenience at your fingertips

**Download our easy-to-use mobile app** to check your account balance, access bill and payment history, make immediate or scheduled payments, view and report outages and more!

It's everything you need from the convenience of your smartphone. Just visit the app store on your mobile phone and search for Avista.



# Do you need help paying your bill?

We understand that there may be instances when customers find themselves facing financial difficulties. Avista partners with community agencies to provide financial assistance, plus we offer other services to help you manage and pay your bill such as Comfort Level Billing, Preferred Due Date, and Payment Arrangements.

We're here to help. Please call us at (800) 227-9187 to discuss your options with a Customer Service Representative or for more information, visit myavista.com/assistance.

We have options.

# Connect with us

Mailing Address: 1411 E. Mission, PO Box 3727, Spokane, WA 99220-3727 Toll-Free: (800) 227-9187 | Web Site: myavista.com | Email: ask@myavista.com



# Proud to support the Southern Oregon Land Conservancy.



myavista.com



September 2022 | Oregon

# Keep your hot water reliable

If your water heater is over ten years old it may be time for an upgrade. Avista Natural Gas customers are eligible for a **\$100** instant discount from Energy Trust of Oregon on qualifying energy efficient water heaters at select retailers.

Learn more about these offers at www.energytrust.org/hotwater.



# Connections



# **Scammers are relentless**

## Be ready and know what to look for.

Scammers prey on the vulnerable and those who may not be aware of what to look for until it is too late. Smishing, short for short message service (SMS) phishing, is a relatively new scam that attempts to trick mobile phone users into giving scammers personal information. Smishing can be used for identity theft, via a text or SMS message. Scammers like smishing, as consumers tend to be more inclined to trust text messages. Avista will only text you if you have previously signed up to receive text messages from Avista. If you do not recognize the sender's phone number, take the following precautions:

- Do not open an unfamiliar text as it may include malicious links that go to a compromised website hosting malware.
- Do not respond to the request.
- Do not click on any links.
- Do not open any attachments.
- Do not provide any personal information.

Visit myavista.com/scams to learn more.

Avista will ONLY text you if you have previously signed up to receive text messages from us.







# Emergency Preparedness

#### September is National Preparedness Month, established to encourage Americans to be prepared for disasters or emergencies in their homes,

**businesses, and communities.** We care about the safety of our

We care about the safety of our customers and communities, and we encourage you to be prepared.

Make sure you have what you need in case of an extended power outage:

- Flashlights
- Fresh batteries
- Portable, battery-powered radio
- Wind-up alarm clock
- Portable cellphone charger
- Manual can opener
- Bottled water and non-perishable food

Take time to understand how things you use every day work without power. Some devices like garage doors, security doors, and electric gates will not function normally when the power goes out. Prepare your home medical equipment. If you have medical needs that require special equipment:

- Plan for a worst-case scenario, like a long power interruption.
- Research portable generators.
- Make a plan with friends or relatives.

For additional information visit us at myavista.com/outage. For real time updates go to myavista.com/getalerts to sign up.

# Natural gas and our clean energy future

Avista is committed to clean energy and creating a sustainable and vibrant future for all of us. Natural gas continues to be a responsible, practical and effective part of reducing emissions and achieving decarbonization. We can't have reliable energy today without it.



In 2021, we announced aspirational goals to reduce natural gas emissions, and we know that direct use of natural gas by our customers will continue to be an important way to meet customers' energy needs and reach these goals.

Read more about the role of natural gas at myavista.com/naturalgasgoals.

# Recognizing a natural gas leak

We, at Avista, want to keep you, your family and neighbors safe around electricity and natural gas. That's why we created some useful and informational safety videos. You can find these at myavista.com/ safetyvideos. And remember, if you have any questions about safety, please call us at (800) 227-9187.

# Connect with us

Mailing Address: 1411 E. Mission, PO Box 3727, Spokane, WA 99220-3727 Toll-Free: (800) 227-9187 | Web Site: myavista.com | Email: ask@myavista.com





June 2022 | Oregon

# Connections

# **Washer incentives**

ENERGY STAR® certified front-load clothes washers use about 33% less water and 25% less energy than standard models, helping you lower costs with every load.

Our partner Energy Trust of Oregon works with select retailers to provide price discounts, improved financing options, and other benefits at the time of purchase for ENERGY STAR certified front-load clothes washers.

Visit energytrust.org/appliances to learn more and find a retailer in your area or call (866) 368-7878.

Energy Trust



# Local treasures with Pia: Oregon Credit Counseling

#### When Bill Ihle started out as CEO and Executive Director of Consumer Credit Counseling Service of Southern Oregon, there wasn't much for him to manage. The agency—which is a recent recipient of Avista Foundation funding toward its Financially Fit Women's program—was floundering, and Ihle went looking for a local partner.

He connected with United Way, an organization he was very familiar with, and learned that there was a huge need for financial education for low-income populations. "We started programs on financial literacy for anyone 30 and younger, but now it's mostly women we serve," Ihle said. Women often suffer significant financial setbacks if they divorce, Ihle said. Some have never had a checking account or a budget, and they've been in relationships where the husband managed all the money.

"Our clients, I'd say more than 80 percent come from extreme lowincome households," Ihle said, "but the programs are open to anyone." About 50 percent of those who set up an appointment don't come in. "People will talk about their cancer and how their kids are in jail, but they will not talk about money problems," Ihle said. "They may feel a deep sense of personal shame."

At Avista, we recognize our unique position gives us the chance to contribute in an impactful way and make a real difference in people's lives. Since 2002, the Avista Foundation has made grants totaling over \$13 million to organizations that support vulnerable and limited income populations, education, and economic and cultural vitality. For more information on grant applications and geographical areas covered, please visit avistafoundation.com.

But there is no shaming at Consumer Credit Counseling Services of Southern Oregon. Ihle said it's very important to the agency that everyone is treated with dignity and compassion. "We don't judge you. We ask how we can help you," Ihle said.

Of the clients who complete the program, 37 percent pay down their debts, 32 percent improve their credit and 13 percent report being able to purchase a car. "That means they can get to a medical appointment, and take the kids to school," Ihle said. "In the very rural communities having a car also means you can get to a job. It means everything."



# **Renewable Natural Gas**

As a focus on clean energy continues to grow at the national, regional and local levels, Avista is moving our clean energy strategy forward. Our customers and communities continue to express interest in how Avista is planning for the future and the long-term sustainability of our communities.

Last year Avista announced our aspirational goals to reduce natural gas emissions 30% by 2030 and to be carbon neutral in our natural gas operations by 2045. These goals built on the clean electricity goals we set in 2019.

Keeping costs affordable will continue to be central in how we move forward, and innovation and new technologies are necessary to achieve these goals. At the same time, we recognize the value of a diverse portfolio and energy mix today and in the future and that achieving these goals will require a multi-faceted approach.

Avista's approach to reducing natural gas emissions includes investing in new technologies, like renewable natural gas (RNG), hydrogen and other renewable biofuels. While we continue to evaluate how to best integrate RNG into our gas supply portfolio and research hydrogen as another renewable fuel, we are also expanding our customer facing options.

Our Washington and Oregon natural gas customers can now elect to participate in our renewable natural gas program. Participation in the program allows customers to continue to receive all of the great benefits associated with natural gas, with the same level of reliability and a lower carbon footprint.

Visit myavista.com/RNG for more information and to enroll.

# **Moving soon?**

Investigate potential energy-use costs with our high-low average tool. Compare the highest, lowest and average bill amounts for the last 12 months of up to three residential addresses. It will give you a good idea of what you can expect—and could lead you to think about ways to use energy more efficiently. Visit myavista.com/HLA to try out this feature for yourself.



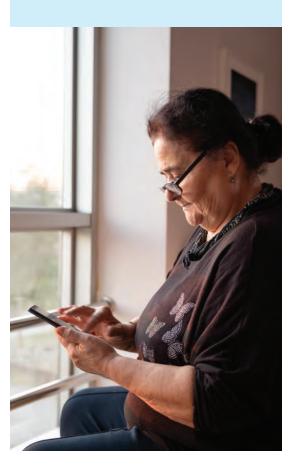
# Do you need help paying your bill?

We understand that there may be instances where customers find themselves facing financial difficulties. Avista partners with community agencies to provide financial assistance, plus we

offer other services to help you manage and pay your bill such as **Comfort Level Billing, Preferred Due Date,** and **Payment Arrangements.** We're

We have options.

here to help. Please call us at (800) 227-9187 to discuss your options with a Customer Service Representative or visit myavista.com/assistance for more information.



# Connect with us

Mailing Address: 1411 E. Mission, PO Box 3727, Spokane, WA 99220-3727 Toll-Free: (800) 227-9187 | Web Site: myavista.com | Email: ask@myavista.com

517i AVA © Copyright 2022 Avista Corporation



#### AVISTA CORP. **RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION: Oregon CASE NO.: **REQUESTER:** TYPE: **REQUEST NO.:** 

UG-461 PUC Staff Data Request Staff - 173

DATE PREPARED: 4/5/2023 WITNESS: **RESPONDER:** DEPT: TELEPHONE: EMAIL:

Joel Anderson Joel Anderson **Regulatory Affairs** (509) 495-2811 joel.anderson@avistacorp.com

#### **REQUEST:**

Please explain in detail to what extent a sales and marketing team is dedicated to the larger customer classes – Schedules 420, 424, 440, and 456.

- Please describe what is included in test year costs that relates to the sales and a. marketing team, for example, salary of sales and marketing team, percentage of time devoted to each customer class stated above, etc.
- b. Please provide workbooks for these test year costs with all cell references and formulae intact.

#### **RESPONSE:**

- A. The sales and marketing team consists of the Company's Account Executives who typically work with the Company's larger commercial and industrial customers. Labor and other expenses related to sales and marketing activities included in the test year was approximately \$105,000. It is estimated that the Account Executive team assigned to Oregon spent approximately 25% of their time with 420 and 424 customers and the other 75% of time with 440 and 456 Customers.
- B. Please see Staff DR 173 Attachment A for a summary of sales and marketing expenses incurred in Oregon during the 12 months ended September 30, 2022.

Sum of Transaction Amount	Column	Labels		
Row Labels	Oregon	Sales and Marketing	Gra	and Total
2021	\$	31,796.60	\$	31,796.60
202110	\$	10,801.81	\$	10,801.81
202111	\$	9,879.09	\$	9,879.09
202112	\$	11,115.70	\$	11,115.70
2022	\$	73,034.90	\$	73,034.90
202201	\$	8,183.82	\$	8,183.82
202202	\$	9,966.14	\$	9,966.14
202203	\$	12,707.02	\$	12,707.02
202204	\$	12,875.33	\$	12,875.33
202205	\$	1,451.84	\$	1,451.84
202206	\$	8,879.55	\$	8,879.55
202207	\$	4,272.13	\$	4,272.13
202208	\$	6,431.84	\$	6,431.84
202209	\$	8,267.23	\$	8,267.23
Grand Total	\$	104,831.50	\$	104,831.50

FERC Account	FERC Account Description	Juriediation	Sonvice	Organization	Accounting	Project	Transaction Description	Expenditure Cotogory	Accounting Voc	Task Number	Summary EVD Cotogon	Expenditure Tupe	Transaction	Project Description
FERC Account		Jurisdiction		Organization Description	Accounting Period	Project Number	Transaction Description	Expenditure Category	Accounting Year	Task Number	Summary EXP Category	Expenditure Type	Transaction Amount	Project Description
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Cab Fare, Uber from Office to hotel while in Spokane for training	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Lodging, Hotel while in Spokane for meetings	Employee Expenses	2021	908010	Non-Labor	230 Employee Lodging		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202203	06800730	SJ109 RICOH inv #8004313657/202203	Voucher	2022	908010	Non-Labor	915 Printing		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Meals, Dinner at Sun River during NWGA conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	55.75	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Meals, Dinner while traveling for Department Meetings	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	57.6	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus.	202209	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	6,170.37	Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Customer Accts. Z87 - Benefits Loaders	202202	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off	1,366.67	Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202201	06800730		Labor	2022	908010	Labor	loading 340 Regular Payroll - NU	425.84	Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202205	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU		Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus.	202110	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU		Marketing Oregon Sales and
908000			GD	Customer Accts. F52 - Key Bus.	202111	06800730	Cab Fare, Travel from hotel to office while in	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc		Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST		GD	Customer Accts. F52 - Key Bus.	202204	06800730	spokane for training Meals, Breakfast while traveling for	Employee Expenses	2022	908010	Non-Labor	Expenses 215 Employee Business		Marketing Oregon Sales and
				Customer Accts.			conference					Meals		Marketing
908000	CUST SVC & INFO EXP-CUST ASST		GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Lunch while out of town for EEI conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Meals, Lunch Meeting with SOLS	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Mileage, Travel to Roseburg for wood products mtg; Chamber	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Meals, Dinner while in Spokane for meetings	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Meals, Lunch while in Spokane for company meetings	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Misc, Roseburg Chamber of Commerce entrance	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202208	06800730	Mileage, Travel to Chamber meeting	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	5	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202206	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	1,300.19	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202203	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	1,277.52	Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202209	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	-1,508.11	Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive	202208	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU	396.67	Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Compensation F52 - Key Bus.	202201	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	5,961.76	Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Customer Accts. F52 - Key Bus.	202111	06800730	Meals, Breakfast while in Spokane for	Employee Expenses	2021	908010	Non-Labor	215 Employee Business		Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST		GD	Customer Accts. F52 - Key Bus.	202111	06800730	meetings Lodging, Hotel while in Spokane for	Employee Expenses	2021	908010	Non-Labor	Meals 230 Employee Lodging		Marketing Oregon Sales and
908000	CUST SVC & INFO EXP-CUST ASST			Customer Accts. F52 - Key Bus.	202204	06800730	training/Meetings	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto		Marketing Oregon Sales and
	CUST SVC & INFO EXP-CUST ASST		GD	Customer Accts.	202204	06800730	RNG projects	Employee Expenses	2022	908010		Mileage		Marketing
908000				F52 - Key Bus. Customer Accts.			Mileage, Travel to meeting with TP				Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST		GD	F52 - Key Bus. Customer Accts.	202205	06800730	airport after business meetings	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST		GD	F52 - Key Bus. Customer Accts.	202206	06800730	Mileage, Travel to meeting with Roseburg Forest Products	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202208	06800730	Meals, Lunch Meeting Timber Products	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Mileage, Travel to lunch meeting	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202203	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	1,789.82	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202206	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	1,652.78	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive	202111	06800730		Overhead	2021	908010	Non-Labor	512 Incentive Loading-NU	238.9	Oregon Sales and
				Compensation										Marketing

FERC Account	FERC Account Description	Jurisdiction	Service	Organization Description	Accounting Period	Project Number	Transaction Description	Expenditure Category	Accounting Year	Task Number	Summary EXP Category	Expenditure Type	Transaction Amount	Project Description
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202205	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU	46.99	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Cab Fare, Travel from hotel to office while in spokane for meetings	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc Expenses	10.27	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Cab Fare, Uber from Hotel to office while in Spokane fo rmeetings	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc Expenses	12.4	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Breakfast while out of town	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	14.16	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Dinner at Hotel during conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	58.92	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Airfare, Alaska 0272133121345, Travel to Spokane office for meetings	Employee Expenses	2022	908010	Non-Labor	205 Airfare	491.2	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Mileage, Travel to meeting at RVTD	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	3.51	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Meals, Lunch Meeting with Bio-Mass One	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	60.77	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Mileage, Travel to meeting with SOLS	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	7.02	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202207	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	4,076.85	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202208	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	3,966.67	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Meals, Dinner while in Spokane for business	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Meals, Lunch while traveling for business	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	32	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Misc, fuel for rental car while in Spokane for business	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses	15.52	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202110	06800730		Overhead	2021	908010	Non-Labor	520 Payroll Time Off loading	1,619.5	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202112	06800730		Overhead	2021	908010	Non-Labor	520 Payroll Time Off loading	1,877.95	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202201	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	1,325.43	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202205	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	141.04	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202209	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	1,212.79	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202112	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU	1,277.52	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202110	06800730		Overhead	2021	908010	Non-Labor	512 Incentive Loading-NU	256.7	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202203	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Meals, Dinner while in Spokane for training	Employee Expenses	2021	908010	Non-Labor	215 Employee Business Meals	116.14	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Meals, Dinner while training in Spokane	Employee Expenses	2021	908010	Non-Labor	215 Employee Business Meals	77.93	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Cab Fare, Uber from airport to hotel while in spokane for meetings	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc Expenses	21.94	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Mileage, Travel to meeting with Medford City Council	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	8.78	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Dinner while out of town for conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Misc, Trip Checks Booking Fee	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Meals, Lunch meeting with Roseburg Forest leadership team (4 people total)	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	123.31	Oregon Sales and Marketing
00080	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Lodging, Lodging while in Spokane for department meetings	Employee Expenses	2022	908010	Non-Labor	230 Employee Lodging	455.01	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202111	06800730		Overhead	2021	908010	Non-Labor	520 Payroll Time Off loading	1,490.45	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202207	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading	674.33	Oregon Sales and Marketing
08000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202111	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU	851.68	Oregon Sales and Marketing
008000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202202	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU	827.89	Oregon Sales and Marketing

FERC Account	FERC Account Description	Jurisdiction	Service	Organization Description	Accounting Period	Project Number	Transaction Description	Expenditure Category	Accounting Year	Task Number	Summary EXP Category	Expenditure Type	Transaction Amount	Project Description
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Meals, Dinner while traveling home from Spokane for team meetings	Employee Expenses	2021	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202203	06800730	Mileage, Travel to Medford Chamber Mtg	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Lunch Ole College Inn, New Orleans Conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Mileage, Travel to business meeting with Boise Cascade EWP	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202204	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202204	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	'	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202208	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202112	06800730		Overhead	2021	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202201	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202207	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202209	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202203	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	· · · ·	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Cab Fare, Travel from office to hotel while in spokane for meetings	Employee Expenses	2021	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Dinner while out of town for energy conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Cab Fare, Uber to office from hotel for business meetings	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Cab Fare, Uber to hotel from office after business meetings	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	,	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Cab Fare, Uber to hotel from airport while in Spokane for business meetings	Employee Expenses	2022	908010	Non-Labor	235 Employee Misc Expenses		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Mileage, Travel to meeting with Bio-Mass One	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Meals, Lunch meeting with TreeTop	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z87 - Benefits Loaders	202208	06800730		Overhead	2022	908010	Non-Labor	520 Payroll Time Off loading		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202110	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202204	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z90 - Incentive Compensation	202206	06800730		Overhead	2022	908010	Non-Labor	512 Incentive Loading-NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202202	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Meals, Breakfast while in Spokane for training	Employee Expenses	2021	908010	Non-Labor	215 Employee Business Meals		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202111	06800730	Mileage, Drive to meeting with SOREDI	Employee Expenses	2021	908010	Non-Labor	210 Employee Auto Mileage		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202112	06800730		Labor	2021	908010	Labor	340 Regular Payroll - NU		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202201	06800730	ANNUAL MEMBERSHIP	Voucher	2022	908010	Non-Labor	830 Dues		Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202204	06800730	Meals, Breakfast Starbucks during conference	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	9.03	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	4,848.17	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202205	06800730	Meals, Dinner while in Spokane for company meetings	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	87.2	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202206	06800730	Mileage, Travel to Chamber Meeting	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	7.02	Oregon Sales and Marketing

FERC Account	FERC Account Description	Jurisdiction	Service	Organization Description	Accounting Period	Project Number	Transaction Description	Expenditure Category	Accounting Year	Task Number	Summary EXP Category	Expenditure Type	Transaction Amount	Project Description
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202208	06800730	Mileage, Travel to and back from airport	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	5.63	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Mileage, Travel to Roseburg for meeting with Swanson	Employee Expenses	2022	908010	Non-Labor	210 Employee Auto Mileage	116.25	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	F52 - Key Bus. Customer Accts.	202209	06800730	Meals, Dinner while in Seattle for business	Employee Expenses	2022	908010	Non-Labor	215 Employee Business Meals	64.97	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202202	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	0	Oregon Sales and Marketing
908000	CUST SVC & INFO EXP-CUST ASST	OR	GD	Z89 - Payroll Accrual	202207	06800730		Labor	2022	908010	Labor	340 Regular Payroll - NU	-705.21	Oregon Sales and Marketing

Footer instructions:A) Delete any items you do not find useful on the footer or select the page from the explorer bar and delete the footer if you prefer not to use any of the elements.B) To Add Parameter Values:1) Replace 'Skillgroup' with the parameter field description2) Delete the text ParamDeisplayValue('SkillGroup') 3)Add a new layout calculation after the text box4) Select ParamDisplayValue and add the parameter value from the parameter source value that you would like to display.5) Repeat this for each parameter value in your report. Selection Criteria:

Change Management Tracker: <u>Tracker</u> Page 2 of 2 Original Request Date: Last Update Request Date: For Internal Use Only

/content/folder[@name='Finance Reporting']/folder[@name='Finance Custom']/folder[@name='Rates']/folder[@name='Joel Anderson']/report[@name='Trans Template'] Distribution:

Report Owner:

Run Date: Mar 29, 2023 2:18:12 PM Report Name: Trans Template Scheduled: Report Author: <u>#Corp BI Support</u>

Staff\_DR\_173 Attachment A

# IN THE COURT OF APPEALS OF THE

# STATE OF OREGON

NORTHWEST NATURAL GAS COMPANY, AVISTA CORPORATION, and CASCADE NATURAL GAS CORPORATION,	CA No. PETITION FOR JUDICIAL REVIEW OF ADMINISTRATIVE RULE
Petitioners,	
V.	
OREGON ENVIRONMENTAL QUALITY COMMISSION,	
Respondent.	
1	

Pursuant to ORS 183.400, Petitioners Northwest Natural Gas Company, Avista Corporation, and Cascade Natural Gas Corporation (collectively, the "Petitioners") seek judicial review of the rules attached as Exhibit 1 that were adopted by Respondent Oregon Environmental Quality Commission (the "EQC") on December 16, 2021 and filed with the Oregon Secretary of State the same day.

2.

The parties to this review are:

# **Petitioners**

Northwest Natural Gas Company 250 SW Taylor Street Portland, OR 97204

Page 1 – Petition for Judicial Review

Avista Corporation 1411 E. Mission Avenue Spokane, WA 99252

Cascade Natural Gas Corporation 8113 W. Grandridge Blvd. Kennewick, WA 99336

# **Respondent**

Oregon Environmental Quality Commission Department of Environmental Quality 4026 Fairview Industrial Drive SE Salem, OR 97302

3.

The Petitioners are jointly represented by:

BAKER BOTTS L.L.P.
Megan H. Berge (CA Bar No. 332536) Motion to admit out-of-state counsel to be filed.
101 California Street
San Francisco, CA 94111
415-291-6233
megan.berge@bakerbotts.com

Sterling Marchand (DC Bar No. 1001065) Motion to admit out-of-state counsel to be filed.
Scott Novak (DC Bar No. 1736274) Motion to admit out-of-state counsel to be filed.
700 K Street NW
Washington, D.C. 20001
202-639-1113
sterling.marchand@bakerbotts.com
scott.novak@bakerbotts.com SNELL & WILMER L.L.P. Clifford S. Davidson, OSB No. 125378 Drew L. Eyman, OSB No. 163762 1455 SW Broadway, Suite 1750 Portland, OR 97201 503-624-6800 csdavidson@swlaw.com deyman@swlaw.com

The Respondent is represented by:

Ellen F. Rosenblum, OSB No. 753239 Attorney General Oregon Department of Justice 400 Justice Building 1162 Court Street, NE Salem, OR 97301-4096 503-378-6002 ellen.f.rosenblum@doj.state.or.us

There are no self-represented parties in this matter.

#### 4.

Petitioners seek review of the Climate Protection Program, adopted on December 16, 2021 by the EQC of the Department of Environmental Quality (the "Rule"). The Rule is attached as Exhibit 1.

The Rule's stated purpose is to create a program intended to reduce greenhouse gas emissions from sources located in Oregon. The Rule purports to do so by imposing declining limits or caps on emissions attributed to the combustion of products sold or transported by covered fuel suppliers, including local distribution companies like Petitioners. The Department of Environmental Quality ("DEQ") developed the program, and EQC approved it, at the direction of Oregon Governor Kate Brown. *See* Office of the Governor – State of Oregon, Exec. Order No. 20-04, 4(c) (May 10, 2020). The first compliance period is 2022 through 2024.

Under the Rule, DEQ imputes to each local distribution company a presumptive quantity of carbon dioxide equivalent emissions resulting from the combustion of the natural gas it imports, sells, or distributes in Oregon. To comply with the Rule, a covered fuel supplier must provide a compliance instrument or a Community Climate Investment ("CCI") credit for each metric ton of carbon dioxide equivalent emissions imputed to that supplier.

Each year, the program distributes to covered fuel suppliers a declining quantity of compliance instruments equivalent to that year's cap. Each compliance instrument represents one metric ton of carbon dioxide equivalent emissions, and may be banked for future compliance periods or traded with other covered fuel suppliers if not used for compliance that year. The number of compliance instruments distributed each year to covered fuel suppliers, including Petitioners, is set at a baseline using data from 2017 through 2019, and will decline each year through 2050. By 2035, the compliance instrument distributions will decline by 50% from the baseline. By 2050, the compliance instrument distributions will decline by 90% from the baseline.

The program also intends that covered fuel suppliers can acquire CCI credits by paying DEQ-approved third-party entities to implement projects purporting to reduce greenhouse gas emissions in Oregon. For the period 2022 through 2024, covered fuel suppliers can use CCI credits to meet only up to 10% of their compliance obligations; this percentage increases to 15% in 2025 through 2027, and to 20% starting in 2028 onward.

Thus, the Rule aims to reduce the amount of natural gas sold or distributed by local distribution companies by shrinking the amount of available compliance instruments and limiting the number of CCI credits that can be used for compliance.

Petitioners challenge the authority of EQC to adopt the Rule. While Petitioners fully support the goal of decarbonization, Petitioners believe that it must be done in a legally supported, consistent, effective, and verifiable way, so that it benefits all Oregonians.

# 5.

Northwest Natural Gas Company ("NW Natural") is a "public utility", as defined in ORS 757.005(1), that provides natural gas distribution services to more than 770,000 customers across the Pacific Northwest, including Oregon. As a public utility company, NW Natural is a "person" under ORS 183.310(8), and ORS 183.400(1) authorizes "any person" to petition the Court of Appeals to determine

## Page 5 – Petition for Judicial Review

"[t]he validity of any rule." NW Natural is not a party to an order or contested case in which the validity of the Rule may be determined by a court.

#### 6.

Avista Corporation ("Avista") is a "public utility", as defined in ORS 757.005(1), providing electricity to 402,000 customers and natural gas to 368,000 customers across four northwestern states, including Oregon. As a public utility company, Avista is a "person" under ORS 183.310(8), and ORS 183.400(1) authorizes "any person" to petition the Court of Appeals to determine "[t]he validity of any rule." Avista is not a party to an order or contested case in which the validity of the Rule may be determined by a court.

## 7.

Cascade Natural Gas Corporation ("Cascade") is a "public utility", as defined in ORS 757.005(1), that provides natural gas to nearly 300,000 customers located in smaller, mostly rural communities across Oregon and Washington. As a public utility company, Cascade is a "person" under ORS 183.310(8), and ORS 183.400(1) authorizes "any person" to petition the Court of Appeals to determine "[t]he validity of any rule." Cascade is not a party to an order or contested case in which the validity of the Rule may be determined by a court.

8.

The Petitioners do not stipulate that the agency record may be shortened.

9.

The Petitioners are entitled to their attorneys' fees and costs pursuant to ORS 183.497.

DATED: March 18, 2022

SNELL & WILMER L.L.P.

*s/ Clifford S. Davidson* Clifford S. Davidson, OSB No. 125378 Drew L. Eyman, OSB No. 163762

# BAKER BOTTS L.L.P.

Megan H. Berge (CA Bar No. 332536) Sterling Marchand (DC Bar No. 1001065) Scott Novak (DC Bar No. 1736274) *Motions to admit out-of-state counsel to be filed.* 

Attorneys for Petitioners

OFFICE OF THE SECRETARY OF STATE SHEMIA FAGAN SECRETARY OF STATE

CHERYL MYERS DEPUTY SECRETARY OF STATE



ARCHIVES DIVISION STEPHANIE CLARK DIRECTOR

800 SUMMER STREET NE SALEM, OR 97310 503-373-0701



12/16/2021 2:32 PM ARCHIVES DIVISION SECRETARY OF STATE & LEGISLATIVE COUNSEL

PERMANENT ADMINISTRATIVE ORDER

DEQ 27-2021 CHAPTER 340 DEPARTMENT OF ENVIRONMENTAL QUALITY

FILING CAPTION: Greenhouse Gas Emissions Program 2021 Rulemaking

EFFECTIVE DATE: 12/16/2021

AGENCY APPROVED DATE: 12/16/2021

CONTACT: Emil Hnidey	700 NE Multnomah St.	Filed By:
503-229-5946	Suite 600	Emil Hnidey
emil.hnidey@deq.oregon.gov	Portland,OR 97232	Rules Coordinator

#### RULES:

340-012-0054, 340-012-0135, 340-012-0140, 340-271-0010, 340-271-0020, 340-271-0030, 340-271-0090, 340-271-0100, 340-271-0110, 340-271-0120, 340-271-0130, 340-271-0150, 340-271-0310, 340-271-0320, 340-271-0330, 340-271-0390, 340-271-0410, 340-271-0420, 340-271-0430, 340-271-0440, 340-271-0450, 340-271-0490, 340-271-0500, 340-271-0510, 340-271-0590, 340-271-0810, 340-271-0820, 340-271-0830, 340-271-0890, 340-271-0900, 340-271-0910, 340-271-0920, 340-271-0930, 340-271-0950, 340-271-0990, 340-271-8100, 340-271-8100, 340-271-8110, 340-271-8120, 340-271-9000

AMEND: 340-012-0054

RULE TITLE: Air Quality Classification of Violations

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: Adding Division 271 to the list of potential violations

RULE TEXT:

(1) Class I:

(a) Constructing a new source or modifying an existing source without first obtaining a required New Source Review/Prevention of Significant Deterioration (NSR/PSD) permit;

(b) Constructing a new source, as defined in OAR 340-245-0020, without first obtaining a required Air Contaminant Discharge Permit that includes permit conditions required under OAR 340-245-0005 through 340-245-8050 or without complying with Cleaner Air Oregon rules under OAR 340-245-0005 through 340-245-8050;

(c) Failing to conduct a source risk assessment, as required under OAR 340-245-0050;

(d) Modifying a source in such a way as to require a permit modification under OAR 340-245-0005 through 340-245-8050, that would increase risk above permitted levels under OAR 340-245-0005 through 340-245-8050 without first obtaining such approval from DEQ;

(e) Operating a major source, as defined in OAR 340-200-0020, without first obtaining the required permit;

(f) Operating an existing source, as defined in OAR 340-245-0020, after a submittal deadline under OAR 340-245-0030 without having submitted a complete application for a Toxic Air Contaminant Permit Addendum required under OAR 340-245-0005 through 340-245-8050;

(g) Exceeding a Plant Site Emission Limit (PSEL);

(h) Exceeding a risk limit, including a Source Risk Limit, applicable to a source under OAR 340-245-0100;

(i) Failing to install control equipment or meet emission limits, operating limits, work practice requirements, or performance standards as required by New Source Performance Standards under OAR 340 division 238 or National Emission Standards for Hazardous Air Pollutant Standards under OAR 340 division 244;

(j) Exceeding a hazardous air pollutant emission limitation;

(k) Failing to comply with an Emergency Action Plan;

(I) Exceeding an opacity or emission limit (including a grain loading standard) or violating an operational or process standard, that was established under New Source Review/Prevention of Significant Deterioration (NSR/PSD);
 (m) Exceeding an emission limit or violating an operational or process standard that was established to limit emissions to avoid classification as a major source, as defined in OAR 340-200-0020;

(n) Exceeding an emission limit or violating an operational limit, process limit, or work practice requirement that was established to limit risk or emissions to avoid exceeding an applicable Risk Action Level or other requirement under OAR 340-245-0005 through 340-245-8050;

(o) Exceeding an emission limit, including a grain loading standard, by a major source, as defined in OAR 340-200-0020, when the violation was detected during a reference method stack test;

(p) Failing to perform testing or monitoring, required by a permit, permit attachment, rule or order, that results in failure to show compliance with a Plant Site Emission Limit or with an emission limitation or a performance standard established under New Source Review/Prevention of Significant Deterioration, National Emission Standards for Hazardous Air Pollutants, New Source Performance Standards, Reasonably Available Control Technology, Best Available Control Technology, Maximum Achievable Control Technology, Typically Achievable Control Technology, Lowest Achievable Emission Rate, Toxics Best Available Control Technology, Toxics Lowest Achievable Emission Rate, or adopted under section 111(d) of the Federal Clean Air Act;

(q) Causing emissions that are a hazard to public safety;

(r) Violating a work practice requirement for asbestos abatement projects;

(s) Improperly storing or openly accumulating friable asbestos material or asbestos-containing waste material;

(t) Conducting an asbestos abatement project, by a person not licensed as an asbestos abatement contractor;

(u) Violating an OAR 340 division 248 disposal requirement for asbestos-containing waste material;

(v) Failing to hire a licensed contractor to conduct an asbestos abatement project;

(w) Openly burning materials which are prohibited from being open burned anywhere in the state by OAR 340-264-0060(3), or burning materials in a solid fuel burning device, fireplace, trash burner or other device as prohibited by OAR 340-262-0900(1);

(x) Failing to install certified vapor recovery equipment;

(y) Delivering for sale a noncompliant vehicle by a vehicle manufacturer in violation of Oregon Low Emission and Zero Emission Vehicle rules set forth in OAR 340 division 257;

(z) Exceeding an Oregon Low Emission Vehicle average emission limit set forth in OAR 340 division 257;

(aa) Failing to comply with Zero Emission Vehicle (ZEV) sales requirements or to meet credit retirement and/or deficit requirements under OAR 340 division 257;

(bb) Failing to obtain a Motor Vehicle Indirect Source Permit as required in OAR 340 division 257;

(cc) Selling, leasing, or renting a noncompliant vehicle by an automobile dealer or rental car agency in violation of Oregon Low Emission Vehicle rules set forth in OAR 340 division 257;

(dd) Failing to comply with any of the clean fuel standards set forth in OAR 340-253-0100(6) and Tables 1 and 2 of OAR 340-253-8010;

(ee) Committing any action related to a credit transfer that is prohibited in OAR 340-253-1005(8);

(ff) Inaccurate reporting that causes illegitimate credits to be generated in the Oregon Clean Fuels Program, OAR chapter 340, division 253, or that understates a regulated party's true compliance obligation denominated in deficits under such program;

(gg) Making misstatements about material information or knowingly or recklessly providing false information when

submitting an application for a carbon intensity score under OAR 340-253-0450;

(hh) Failing to timely submit a complete and accurate annual compliance report under OAR 340-253-0100(8);

(ii) Failing to timely submit a complete and accurate emissions data report under OAR 340-215-0044 and OAR 340-215-0046;

(jj) Submitting a verification statement to DEQ prepared by a person not approved by DEQ under OAR 340-272-0220 to perform verification services;

(kk) Failing to timely submit a verification statement that meets the verification requirements under OAR 340-272-0100 and OAR 340-272-0495;

(II) Failing to submit a revised application or report to DEQ according to OAR 340-272-0435;

(mm) Failing to complete re-verification according to OAR 340-272-0350(2);

(nn) Failing to timely submit a Methane Generation Rate Report or Instantaneous Surface Monitoring Report according to OAR 340-239-0105;

(oo) Failing to timely submit a Design Plan or Amended Design Plan in accordance with OAR 340-239-0110(1);

(pp) Failing to timely install and operate a landfill gas collection and control system according to OAR 340-239-0110(1); (qq) Failing to operate a landfill gas collection and control system or conduct performance testing of a landfill gas

control device according to the requirements in OAR 340-239-0110(2);

(rr) Failing to conduct landfill wellhead sampling under OAR 340-239-0110(3);

(ss) Failing to comply with a landfill compliance standard in OAR 340-239-0200;

(tt) Failing to conduct monitoring or remonitoring in accordance with OAR 340-239-0600 that results in a failure to demonstrate compliance with a landfill compliance standard in OAR 340-239-0200 or the 200 ppmv threshold in OAR 340-239-0105(5)(b) or OAR 340-239-0400(2)(c);

(uu) Failure to take corrective actions in accordance with OAR 340-239-0600(1);

(vv) Failing to comply with a landfill gas collection and control system permanent shutdown and removal requirement in OAR 340-239-0400(1);

(ww) Delivering for sale a new noncompliant on highway heavy duty engine, truck or trailer in violation of rules set forth under OAR 340 division 261;

(xx) Failing to notify DEQ of changes in ownership or operational control or changes to related entities under OAR 340-271-0120;

(yy) Owning or operating a covered entity, identified in OAR 340-271-0110, after a submittal deadline under OAR 340-271-0150(1)(a) or OAR 340-271-0330(1)(b) without having submitted a complete application for a Climate Protection Program permit addendum required under OAR 340-271-0150;

(zz) Emitting covered emissions from a covered entity, as identified in OAR 340-271-0110, that is a new source, as defined in OAR 340-271-0020, without having been issued a BAER order under OAR 340-271-0320 and a permit issued under OAR 340-271-0150(3)(c);

(aaa) Failing to submit a BAER assessment or an updated BAER assessment according to OAR 340-271-0310; (bbb) Failing to comply with a BAER order issued under OAR 340-271-0320.

(ccc) Failing to comply with a condition in a permit, Climate Protection Program permit, or Climate Protection Program permit addendum issued according to OAR 340-271-0150 that requires the reduction of greenhouse gas emissions; (ddd) Failing to demonstrate compliance according to OAR 340-271-0450;

(eee) Failing to comply with the requirements for trading of compliance instruments under OAR 340-271-0500 or 340-271-0510; or

(fff) Submitting false or inaccurate information on any application or submittal required under OAR Chapter 340 division 271.

(2) Class II:

(a) Constructing or operating a source required to have an Air Contaminant Discharge Permit (ACDP), ACDP attachment, or registration without first obtaining such permit or registration, unless otherwise classified;(b) Violating the terms or conditions of a permit, permit attachment or license, unless otherwise classified;

(c) Modifying a source in such a way as to require a permit or permit attachment modification from DEQ without first obtaining such approval from DEQ, unless otherwise classified;

(d) Exceeding an opacity limit, unless otherwise classified;

(e) Exceeding a Volatile Organic Compound (VOC) emission standard, operational requirement, control requirement or VOC content limitation established by OAR 340 division 232;

(f) Failing to timely submit a complete ACDP annual report or permit attachment annual report;

(g) Failing to timely submit a certification, report, or plan as required by rule, permit or permit attachment, unless otherwise classified;

(h) Failing to timely submit a complete permit application, ACDP attachment application, or permit renewal application;
(i) Failing to submit a timely and complete toxic air contaminant emissions inventory as required under OAR 340-245-0005 through 340-245-8050;

(j) Failing to comply with the open burning requirements for commercial, construction, demolition, or industrial wastes in violation of OAR 340-264-0080 through 0180;

(k) Failing to comply with open burning requirements in violation of any provision of OAR 340 division 264, unless otherwise classified; or burning materials in a solid fuel burning device, fireplace, trash burner or other device as prohibited by OAR 340-262-0900(2).

(I) Failing to replace, repair, or modify any worn or ineffective component or design element to ensure the vapor tight integrity and efficiency of a stage I or stage II vapor collection system;

(m) Failing to provide timely, accurate or complete notification of an asbestos abatement project;

(n) Failing to perform a final air clearance test or submit an asbestos abatement project air clearance report for an asbestos abatement project;

(o) Violating on road motor vehicle refinishing rules contained in OAR 340-242-0620;

(p) Failing to comply with an Oregon Low Emission Vehicle reporting, notification, or warranty requirement set forth in OAR division 257;

(q) Failing to register as a regulated party in the Oregon Clean Fuels Program under OAR 340-253-0100(1) and (4),

when the person is a producer or importer of blendstocks, as defined in OAR 340-253-0040;

(r) Failing to register as an aggregator or submit an aggregator designation form under OAR 340-253-0100(3) and (4)(c);

(s) Failing to keep records under OAR 340-253-0600 when the records relate to obtaining a carbon intensity under OAR 340-253-0450;

(t) Failing to keep records related to obtaining a carbon intensity under OAR 340-253-0450;

(u) Failing to timely submit a complete and accurate quarterly report under OAR 340-253-0100(7);

(v) Violating any requirement under OAR Chapter 340 division 272, unless otherwise classified;

(w) Violating any requirement under OAR 340, division 239, unless otherwise classified;

(x) Failing to comply with the reporting notification or warranty requirements for new engines, trucks, and trailers set forth in OAR Chapter 340, division 261;

(y) Violating any requirement under the Climate Protection Program, OAR Chapter 340, division 271, unless otherwise classified; or

(z) Violating any condition in a permit, Climate Protection Program permit, or Climate Protection Program permit addendum issued according to OAR 340-271-0150, unless otherwise classified.

(3) Class III:

(a) Failing to perform testing or monitoring required by a permit, rule or order where missing data can be reconstructed to show compliance with standards, emission limitations or underlying requirements;

(b) Constructing or operating a source required to have a Basic Air Contaminant Discharge Permit without first obtaining the permit;

(c) Modifying a source in such a way as to require construction approval from DEQ without first obtaining such approval from DEQ, unless otherwise classified;

(d) Failing to revise a notification of an asbestos abatement project when necessary, unless otherwise classified;

(e) Submitting a late air clearance report that demonstrates compliance with the standards for an asbestos abatement project;

(f) Licensing a noncompliant vehicle by an automobile dealer or rental car agency in violation of Oregon Low Emission Vehicle rules set forth in OAR 340 division 257;

(g) Failing to register as a regulated party in the Oregon Clean Fuels Program under OAR 340-253-0100(1) and (4),

when the person is an importer of finished fuels, as defined in OAR 340-253-0040; or

(h) Failing to keep records under OAR 340-253-0600, except as provided in subsection (2)(s).

[Note: Tables and Publications referenced are available from the agency.]

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.045

STATUTES/OTHER IMPLEMENTED: ORS 468.020, 468A.025

AMEND: 340-012-0135

RULE TITLE: Selected Magnitude Categories

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: Adding Division 271 to the list of magnitude categories.

RULE TEXT:

(1) Magnitudes for selected Air Quality violations will be determined as follows:

(a) Opacity limit violations:

(A) Major — Opacity measurements or readings of 20 percent opacity or more over the applicable limit, or an opacity violation by a federal major source as defined in OAR 340-200-0020;

(B) Moderate — Opacity measurements or readings greater than 10 percent opacity and less than 20 percent opacity over the applicable limit; or

(C) Minor — Opacity measurements or readings of 10 percent opacity or less over the applicable limit.

(b) Operating a major source, as defined in OAR 340-200-0020, without first obtaining the required permit: Major — if a Lowest Achievable Emission Rate (LAER) or Best Available Control Technology (BACT) analysis shows that additional controls or offsets are or were needed, otherwise apply OAR 340-012-0130.

(c) Exceeding an emission limit established under New Source Review/Prevention of Significant Deterioration (NSR/PSD): Major — if exceeded the emission limit by more than 50 percent of the limit, otherwise apply OAR 340-012-0130.

(d) Exceeding an emission limit established under federal National Emission Standards for Hazardous Air Pollutants (NESHAPs): Major — if exceeded the Maximum Achievable Control Technology (MACT) standard emission limit for a directly-measured hazardous air pollutant (HAP), otherwise apply OAR 340-012-0130.

(e) Exceeding a cancer or noncancer risk limit that is equivalent to a Risk Action Level or a Source Risk Limit if the limit is a Risk Action Level established under OAR 340-245-0005 through 340-245-8050: Major, otherwise apply OAR 340-012-0130.

(f) Air contaminant emission limit violations for selected air pollutants: Magnitude determinations under this subsection will be made based upon significant emission rate (SER) amounts listed in OAR 340-200-0020.

(A) Major:

(i) Exceeding the annual emission limit as established by permit, rule or order by more than the annual SER; or

(ii) Exceeding the short-term (less than one year) emission limit as established by permit, rule or order by more than the applicable short-term SER.

(B) Moderate:

(i) Exceeding the annual emission limit as established by permit, rule or order by an amount from 50 up to and including 100 percent of the annual SER; or

(ii) Exceeding the short-term (less than one-year) emission limit as established by permit, rule or order by an amount from 50 up to and including 100 percent of the applicable short-term SER.

(C) Minor:

(i) Exceeding the annual emission limit as established by permit, rule or order by an amount less than 50 percent of the annual SER; or

(ii) Exceeding the short-term (less than one year) emission limit as established by permit, rule or order by an amount less than 50 percent of the applicable short-term SER.

(g) Violations of Emergency Action Plans: Major — Major magnitude in all cases.

(h) Violations of on road motor vehicle refinishing rules contained in OAR 340-242-0620: Minor — Refinishing 10 or fewer on road motor vehicles per year.

(i) Asbestos violations — These selected magnitudes apply unless the violation does not cause the potential for human exposure to asbestos fibers:

(A) Major - More than 260 linear feet or more than 160 square feet of asbestos-containing material or asbestos-

containing waste material;

(B) Moderate — From 40 linear feet up to and including 260 linear feet or from 80 square feet up to and including 160 square feet of asbestos-containing material or asbestos-containing waste material; or

(C) Minor — Less than 40 linear feet or 80 square feet of asbestos-containing material or asbestos-containing waste material.

(D) The magnitude of the asbestos violation may be increased by one level if the material was comprised of more than five percent asbestos.

(j) Open burning violations:

(A) Major — Initiating or allowing the initiation of open burning of 20 or more cubic yards of commercial, construction, demolition and/or industrial waste; or 5 or more cubic yards of prohibited materials (inclusive of tires); or 10 or more tires;

(B) Moderate — Initiating or allowing the initiation of open burning of 10 or more, but less than 20 cubic yards of commercial, construction, demolition and/or industrial waste; or 2 or more, but less than 5 cubic yards of prohibited materials (inclusive of tires); or 3 to 9 tires; or if DEQ lacks sufficient information upon which to make a determination of the type of waste, number of cubic yards or number of tires burned; or

(C) Minor — Initiating or allowing the initiation of open burning of less than 10 cubic yards of commercial, construction, demolition and/or industrial waste; or less than 2 cubic yards of prohibited materials (inclusive of tires); or 2 or less tires.

(D) The selected magnitude may be increased one level if DEQ finds that one or more of the following are true, or decreased one level if DEQ finds that none of the following are true:

(i) The burning took place in an open burning control area;

(ii) The burning took place in an area where open burning is prohibited;

(iii) The burning took place in a non-attainment or maintenance area for PM10 or PM2.5; or

(iv) The burning took place on a day when all open burning was prohibited due to meteorological conditions.

(k) Oregon Low Emission Vehicle Non-Methane Gas (NMOG) or Green House Gas (GHG) fleet average emission limit violations:

(A) Major - Exceeding the limit by more than 10 percent; or

(B) Moderate — Exceeding the limit by 10 percent or less.

(I) Oregon Clean Fuels Program violations:

(A) Exceeding the clean fuel standards set forth in OAR 340-253-0100(6) and Tables 1 and 2 of 340-253-8010 by not retiring sufficient credits to satisfy a regulated party's compliance obligation:

(i) Major — more than 15 percent of their total deficit obligation remains unsatisfied;

(ii) Moderate — more than 10 percent but less than 15 percent of their total deficit obligation remains unsatisfied; or (iii) Minor —less than 10 percent of their total deficit obligation remains unsatisfied.

(B) Failing to register under OAR 340-253-0100(1) and (4): Moderate - producers and importers of blendstocks;

(C) Failing to submit an aggregator designation form under OAR 340-253-0100(3) and (4)(c): Minor;

(D) Failing to keep records as set forth in OAR 340-253-0600, when the records relate to obtaining a carbon intensity under OAR 340-253-04500600: Minor;

(E) Failing to submit a complete and accurate annual compliance report or quarterly report under OAR chapter 340 division 253: Moderate;

(F) Failing to timely submit a complete and accurate annual compliance report or quarterly report under OAR chapter 340, division 253: Minor.

(m) Failing to timely submit a complete and accurate emissions data report under the Oregon Greenhouse Gas Reporting Program, OAR chapter 340, division 215, where the untimely, incomplete or inaccurate reporting impacts applicability or any compliance obligation under the Climate Protection Program, OAR chapter 340, division 271: Major.

(n) Oregon Climate Protection Program violations:

(A) Failing to demonstrate compliance according to OAR 340-271-0450: Major.

(B) Failing to comply with a BAER order issued under OAR 340-271-0320: Major

(C) Failing to comply with a condition in a permit, Climate Protection Program permit, or Climate Protection Program permit addendum issued according to OAR 340-271-0150 that requires the reduction of greenhouse gas emissions: Major.

(D) Failing to obtain a BAER order under OAR 340-271-0320 or a permit issued under OAR 340-271-0150(3)(c), for a covered entity, as identified in OAR 340-271-0110, that is a new source, as defined in OAR 340-271-0020: Major.
(2) Magnitudes for selected Water Quality violations will be determined as follows:

(a) Violating wastewater discharge permit effluent limitations:

#### (A) Major:

(i) The dilution (D) of the spill or technology based effluent limitation exceedance was less than two, when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the estimated receiving stream flow and QI is the estimated quantity or discharge rate of the incident;

(ii) The receiving stream flow at the time of the water quality based effluent limitation (WQBEL) exceedance was at or below the flow used to calculate the WQBEL; or

(iii) The resulting water quality from the spill or discharge was as follows:

(I) For discharges of toxic pollutants: CS/D was more than CAcute, where CS is the concentration of the discharge, D is the dilution of the discharge as determined under (2)(a)(A)(i), and CAcute is the concentration for acute toxicity (as defined by the applicable water quality standard);

(II) For spills or discharges affecting temperature, when the discharge temperature is at or above 32 degrees centigrade after two seconds from the outfall; or

(III) For BOD5 discharges: (BOD5)/D is more than 10, where BOD5 is the concentration of the five-day Biochemical Oxygen Demand of the discharge and D is the dilution of the discharge as determined under (2)(a)(A)(i).(B) Moderate:

(i) The dilution (D) of the spill or the technology based effluent limitation exceedance was two or more but less than 10 when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the estimated receiving stream flow and QI is the estimated quantity or discharge rate of the discharge; or

(ii) The receiving stream flow at the time of the WQBEL exceedance was greater than, but less than twice, the flow used to calculate the WQBEL.

(C) Minor:

(i) The dilution (D) of the spill or the technology based effluent limitation exceedance was 10 or more when calculated as follows: D = ((QR/4) + QI)/QI, where QR is the receiving stream flow and QI is the quantity or discharge rate of the incident; or

(ii) The receiving stream flow at the time of the WQBEL exceedance was twice the flow or more of the flow used to calculate the WQBEL.

(b) Violating numeric water quality standards:

(A) Major:

(i) Increased the concentration of any pollutant except for toxics, dissolved oxygen, pH, and turbidity, by 25 percent or more of the standard;

(ii) Decreased the dissolved oxygen concentration by two or more milligrams per liter below the standard;

(iii) Increased the toxic pollutant concentration by any amount over the acute standard or by 100 percent or more of the chronic standard;

(iv) Increased or decreased pH by one or more pH units from the standard; or

(v) Increased turbidity by 50 or more nephelometric turbidity units (NTU) over background.

(B) Moderate:

(i) Increased the concentration of any pollutant except for toxics, pH, and turbidity by more than 10 percent but less than 25 percent of the standard;

(ii) Decreased dissolved oxygen concentration by one or more, but less than two, milligrams per liter below the standard;

(iii) Increased the concentration of toxic pollutants by more than 10 percent but less than 100 percent of the chronic standard;

(iv) Increased or decreased pH by more than 0.5 pH unit but less than 1.0 pH unit from the standard; or

(v) Increased turbidity by more than 20 but less than 50 NTU over background.

(C) Minor:

(i) Increased the concentration of any pollutant, except for toxics, pH, and turbidity, by 10 percent or less of the standard;

(ii) Decreased the dissolved oxygen concentration by less than one milligram per liter below the standard;

(iii) Increased the concentration of toxic pollutants by 10 percent or less of the chronic standard;

(iv) Increased or decreased pH by 0.5 pH unit or less from the standard; or

(v) Increased turbidity by 20 NTU or less over background.

(c) The selected magnitude under (2)(a) or (b) may be increased one or more levels if the violation:

(A) Occurred in a water body that is water quality limited (listed on the most current 303(d) list) and the discharge is the same pollutant for which the water body is listed;

(B) Depressed oxygen levels or increased turbidity and/or sedimentation in a stream in which salmonids may be rearing or spawning as indicated by the beneficial use maps available at OAR 340-041-0101 through 0340;

(C) Violated a bacteria standard either in shellfish growing waters or during the period from June 1 through September 30; or

(D) Resulted in a documented fish or wildlife kill.

(3) Magnitudes for selected Solid Waste violations will be determined as follows:

(a) Operating a solid waste disposal facility without a permit or disposing of solid waste at an unpermitted site:

(A) Major — The volume of material disposed of exceeds 400 cubic yards;

(B) Moderate — The volume of material disposed of is greater than or equal to 40 cubic yards and less than or equal to 400 cubic yards; or

(C) Minor — The volume of materials disposed of is less than 40 cubic yards.

(D) The magnitude of the violation may be raised by one magnitude if the material disposed of was either in the floodplain of waters of the state or within 100 feet of waters of the state.

(b) Failing to accurately report the amount of solid waste disposed:

(A) Major — The amount of solid waste is underreported by 15 percent or more of the amount received;

(B) Moderate — The amount of solid waste is underreported by 5 percent or more, but less than 15 percent, of the amount received; or

(C) Minor — The amount of solid waste is underreported by less than 5 percent of the amount received.

(4) Magnitudes for selected Hazardous Waste violations will be determined as follows:

(a) Failure to make a hazardous waste determination;

(A) Major — Failure to make the determination on five or more waste streams;

(B) Moderate — Failure to make the determination on three or four waste streams; or

(C) Minor — Failure to make the determination on one or two waste streams.

(b) Hazardous Waste treatment, storage and disposal violations of OAR 340-012-0068(1)(b), (c), (h), (k), (l), (m), (p), (q) and (r):

(A) Major:

(i) Treatment, storage, or disposal of more than 55 gallons or 330 pounds of hazardous waste; or

(ii) Treatment, storage, or disposal of at least one quart or 2.2 pounds of acutely hazardous waste.

(B) Moderate:

(i) Treatment, storage, or disposal of 55 gallons or 330 pounds or less of hazardous waste; or

(ii) Treatment, storage, or disposal of less than one quart or 2.2 pounds of acutely hazardous waste.

(c) Hazardous waste management violations classified in OAR 340-012-0068(1)(d), (e) (f), (g), (i), (j), (n), (s) and (2)(a), (b), (d), (e), (h), (i), (k), (m), (n), (o), (p), (r) and (s):

(A) Major:

(i) Hazardous waste management violations involving more than 1,000 gallons or 6,000 pounds of hazardous waste; or

(ii) Hazardous waste management violations involving at least one quart or 2.2 pounds of acutely hazardous waste. (B) Moderate:

(i) Hazardous waste management violations involving more than 250 gallons or 1,500 pounds, up to and including 1,000 gallons or 6,000 pounds of hazardous waste; or

(ii) Hazardous waste management violations involving less than one quart or 2.2 pounds of acutely hazardous waste. (C) Minor:

(i) Hazardous waste management violations involving 250 gallons or 1,500 pounds or less of hazardous waste and no acutely hazardous waste.

(5) Magnitudes for selected Used Oil violations (OAR 340-012-0072) will be determined as follows:

(a) Used Oil violations set forth in OAR 340-012-0072(1)(f), (h), (i), (j); and (2)(a) through (h):

(A) Major — Used oil management violations involving more than 1,000 gallons or 7,000 pounds of used oil or used oil mixtures;

(B) Moderate — Used oil management violations involving more than 250 gallons or 1,750 pounds, up to and including 1,000 gallons or 7,000 pounds of used oil or used oil mixture; or

(C) Minor — Used oil management violations involving 250 gallons or 1,750 pounds or less of used oil or used oil mixtures.

(b) Used Oil spill or disposal violations set forth in OAR 340-012-0072(1)(a) through (e), (g) and (k).

(A) Major — A spill or disposal involving more than 420 gallons or 2,940 pounds of used oil or used oil mixtures;

(B) Moderate — A spill or disposal involving more than 42 gallons or 294 pounds, up to and including 420 gallons or 2,940 pounds of used oil or used oil mixtures; or

(C) Minor — A spill or disposal of used oil involving 42 gallons or 294 pounds or less of used oil or used oil mixtures.

[NOTE: Tables & Publications referenced are available from the agency.]

STATUTORY/OTHER AUTHORITY: ORS 468.065, 468A.045

STATUTES/OTHER IMPLEMENTED: ORS 468.090 - 468.140, 468A.060

AMEND: 340-012-0140

RULE TITLE: Determination of Base Penalty

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: Adding Division 271 to the list of penalties.

RULE TEXT:

(1) Except for Class III violations and as provided in OAR 340-012-0155, the base penalty (BP) is determined by applying the class and magnitude of the violation to the matrices set forth in this section. For Class III violations, no magnitude determination is required.

(2) \$12,000 Penalty Matrix:

(a) The \$12,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have a Title V permit or an Air Contaminant Discharge Permit (ACDP) issued pursuant to New Source Review (NSR) regulations or Prevention of Significant Deterioration (PSD) regulations, or section 112(g) of the federal Clean Air Act, unless otherwise classified.

(B) Open burning violations as follows:

(i) Any violation of OAR 340-264-0060(3) committed by an industrial facility operating under an air quality permit.

(ii) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned, except when committed by a residential owner-occupant.

(C) Any violation of the Oregon Low Emission and Zero Emission Vehicle rules (OAR 340-257) by a vehicle manufacturer.

(D) Any violation of ORS 468B.025(1)(a) or (1)(b), or of 468B.050(1)(a) by a person without a National Pollutant Discharge Elimination System (NPDES) permit, unless otherwise classified.

(E) Any violation of a water quality statute, rule, permit or related order by:

(i) A person that has an NPDES permit, or that has or should have a Water Pollution Control Facility (WPCF) permit, for a municipal or private utility sewage treatment facility with a permitted flow of five million or more gallons per day.
(ii) A person that has a Tier 1 industrial source NPDES or WPCF permit.

(iii) A person that has a population of 100,000 or more, as determined by the most recent national census, and either has or should have a WPCF Municipal Stormwater Underground Injection Control (UIC) System Permit, or has an NPDES Municipal Separated Storm Sewer Systems (MS4) Stormwater Discharge Permit.

(iv) A person that installs or operates a prohibited Class I, II, III, IV or V UIC system, except for a cesspool.

(v) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that disturbs 20 or more acres.

(F) Any violation of the ballast water statute in ORS Chapter 783 or ballast water management rule in OAR 340, division 143.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification by a 100 megawatt or more hydroelectric facility.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a dredge and fill project except for Tier 1, 2A or 2B projects.

(I) Any violation of an underground storage tanks statute, rule, permit or related order committed by the owner, operator or permittee of 10 or more UST facilities or a person who is licensed or should be licensed by DEQ to perform tank services.

(J) Any violation of a heating oil tank statute, rule, permit, license or related order committed by a person who is licensed or should be licensed by DEQ to perform heating oil tank services.

(K) Any violation of ORS 468B.485, or related rules or orders regarding financial assurance for ships transporting hazardous materials or oil.

(L) Any violation of a used oil statute, rule, permit or related order committed by a person who is a used oil transporter,

transfer facility, processor or re-refiner, off-specification used oil burner or used oil marketer.

(M) Any violation of a hazardous waste statute, rule, permit or related order by:

(i) A person that is a large quantity generator or hazardous waste transporter.

(ii) A person that has or should have a treatment, storage or disposal facility permit.

(N) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a covered vessel or facility as defined in ORS 468B.300 or by a person who is engaged in the business of manufacturing, storing or transporting oil or hazardous materials.

(O) Any violation of a polychlorinated biphenyls (PCBs) management and disposal statute, rule, permit or related order.

(P) Any violation of ORS Chapter 465, UST or environmental cleanup statute, rule, related order or related agreement.

(Q) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or any violation of a solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a solid waste disposal permit.

(ii) A city with a population of 25,000 or more, as determined by the most recent national census.

(R) Any violation of the Oregon Clean Fuels Program under OAR Chapter 340, division 253 by a person registered as an importer of blendstocks,

(S) Any violation classified under OAR 340-012-0054 (1) (ee), (ff), or (gg).

(T) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions greater than or equal to 25,000 metric tons per year or by a person that has not reported greenhouse gas emissions to DEQ during the past five years, or by a person for which DEQ has insufficient information to accurately estimate emissions.

(U) Any violation of the Third Party Verification rules under OAR Chapter 340, division 272.

(V) Any violation of the Landfill Gas Emissions rules under OAR Chapter 340, division 239 by a person required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(W) Any violation of the rules for Emission Standards for New Heavy-Duty Trucks under OAR Chapter 340 division 261 by engine, truck or trailer manufacturers and dealers.

(X) Any violation of the Climate Protection Program rules under OAR Chapter 340, division 271.

(b) The base penalty values for the \$12,000 penalty matrix are as follows:

(A) Class I:

(i) Major — \$12,000;

(ii) Moderate — \$6,000;

(iii) Minor — \$3,000.

(B) Class II:

(i) Major — \$6,000;

(ii) Moderate — \$3,000;

(iii) Minor — \$1,500.

(C) Class III: \$1,000.

(3) \$8,000 Penalty Matrix:

(a) The \$8,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have an ACDP permit, except for NSR, PSD and Basic ACDP permits, unless listed under another penalty matrix, unless otherwise classified.

(B) Any violation of an asbestos statute, rule, permit or related order except those violations listed in section (5) of this rule.

(C) Any violation of a vehicle inspection program statute, rule, permit or related order committed by an auto repair facility.

(D) Any violation of the Oregon Low Emission Vehicle rules (OAR 340-257) committed by an automobile dealer or an automobile rental agency.

(E) Any violation of a water quality statute, rule, permit or related order committed by:

(i) A person that has an NPDES Permit, or that has or should have a WPCF Permit, for a municipal or private utility sewage treatment facility with a permitted flow of two million or more, but less than five million, gallons per day.
(ii) A person that has a Tier 2 industrial source NPDES or WPCF Permit.

(iii) A person that has or should have applied for coverage under an NPDES or a WPCF General Permit, except an NPDES Stormwater Discharge 1200-C General Permit for a construction site of less than five acres in size or 20 or more acres in size.

(iv) A person that has a population of less than 100,000 but more than 10,000, as determined by the most recent national census, and has or should have a WPCF Municipal Stormwater UIC System Permit or has an NPDES MS4 Stormwater Discharge Permit.

(v) A person that owns, and that has or should have registered, a UIC system that disposes of wastewater other than stormwater or sewage or geothermal fluids.

(F) Any violation of a Clean Water Act Section 401 Water Quality Certification by a less than 100 megawatt hydroelectric facility.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 2A or Tier 2B dredge and fill project.

(H) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of five to nine UST facilities.

(I) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a waste tire permit; or

(ii) A person with a population of more than 5,000 but less than or equal to 25,000, as determined by the most recent national census.

(J) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a small quantity generator.

(K) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person other than a person listed in OAR 340-012-0140(2)(a)(N) occurring during a commercial activity or involving a derelict vessel over 35 feet in length.

(L) Any violation of the Oregon Clean Fuels Program under OAR Chapter 340, division 253 by a person registered as a credit generator, an aggregator, or a registered fuel producer unless the violation is otherwise classified in this rule.

(M) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 25,000 metric tons per year but greater than or equal to 5,000 metric tons per year.

(N) Any violation of the Landfill Gas Emissions rules under OAR Chapter 340, division 239 by a person that owns or operates a landfill with over 200,000 tons waste in place and is not required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(O) Any violation of a hazardous waste pharmaceutical statute, rule, permit or related order committed by a person that is a reverse distributor.

(b) The base penalty values for the \$8,000 penalty matrix are as follows:

- (A) Class I:
- (i) Major \$8,000.
- (ii) Moderate \$4,000.
- (iii) Minor \$2,000.
- (B) Class II:
- (i) Major \$4,000.
- (ii) Moderate \$2,000.
- (iii) Minor \$1,000.

(C) Class III: \$ 700.

(4) \$3,000 Penalty Matrix:

(a) The \$3,000 penalty matrix applies to the following:

(A) Any violation of any statute, rule, permit, license, or order committed by a person not listed under another penalty matrix.

(B) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person not listed under another penalty matrix.

(C) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have a Basic ACDP or an ACDP or registration only because the person is subject to Area Source NESHAP regulations.

(D) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned by a residential owner-occupant.

(E) Any violation of a vehicle inspection program statute, rule, permit or related order committed by a natural person, except for those violations listed in section (5) of this rule.

(F) Any violation of a water quality statute, rule, permit, license or related order not listed under another penalty matrix and committed by:

(i) A person that has an NPDES permit, or has or should have a WPCF permit, for a municipal or private utility wastewater treatment facility with a permitted flow of less than two million gallons per day.

(ii) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that is more than one, but less than five acres.

(iii) A person that has a population of 10,000 or less, as determined by the most recent national census, and either has an NPDES MS4 Stormwater Discharge Permit or has or should have a WPCF Municipal Stormwater UIC System Permit.

(iv) A person who is licensed to perform onsite sewage disposal services or who has performed sewage disposal services.

(v) A person, except for a residential owner-occupant, that owns and either has or should have registered a UIC system that disposes of stormwater, sewage or geothermal fluids.

(vi) A person that has or should have a WPCF individual stormwater UIC system permit.

(vii) Any violation of a water quality statute, rule, permit or related order committed by a person that has or should have applied for coverage under an NPDES 700-PM General Permit for suction dredges.

(G) Any violation of an onsite sewage disposal statute, rule, permit or related order, except for a violation committed by a residential owner-occupant.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 1 dredge and fill project.

(I) Any violation of an UST statute, rule, permit or related order if the person is the owner, operator or permittee of two to four UST facilities.

(J) Any violation of a used oil statute, rule, permit or related order, except a violation related to a spill or release, committed by a person that is a used oil generator.

(K) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a very small quantity generator, unless listed under another penalty matrix.

(L) Any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by a person with a population less than 5,000, as determined by the most recent national census.

(M) Any violation of the labeling requirements of ORS 459A.675 through 459A.685.

(N) Any violation of rigid pesticide container disposal requirements by a very small quantity generator of hazardous waste.

(O) Any violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by non-residential uses of property disturbing less than one acre in size.

(P) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person not listed under another matrix.

(Q) Any violation of the Oregon Clean Fuels Program under OAR chapter 340, division 253 by a person registered as an

importer of finished fuels unless the violation is otherwise classified in this rule.

(R) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 5,000 metric tons per year.

(b) The base penalty values for the \$3,000 penalty matrix are as follows:

(A) Class I:

(i) Major — \$3,000;

(ii) Moderate — \$1,500;

- (iii) Minor \$750.
- (B) Class II:
- (i) Major \$1,500;
- (ii) Moderate \$750;

(iii) Minor — \$375.

(C) Class III: \$250.

(5) \$1,000 Penalty Matrix:

(a) The \$1,000 penalty matrix applies to the following:

(A) Any violation of an open burning statute, rule, permit or related order committed by a residential owner-occupant at the residence, not listed under another penalty matrix.

(B) Any violation of visible emissions standards by operation of a vehicle.

(C) Any violation of an asbestos statute, rule, permit or related order committed by a residential owner-occupant.

(D) Any violation of an onsite sewage disposal statute, rule, permit or related order of OAR chapter 340, division 44 committed by a residential owner-occupant.

(E) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of one UST facility.

(F) Any violation of an HOT statute, rule, permit or related order not listed under another penalty matrix.

(G) Any violation of OAR chapter 340, division 124 or ORS 465.505 by a dry cleaning owner or operator, dry store owner or operator, or supplier of perchloroethylene.

(H) Any violation of ORS Chapter 459 or other solid waste statute, rule or related order committed by a residential owner-occupant.

(I) Any violation of a statute, rule, permit or order relating to rigid plastic containers, except for violation of the labeling requirements under OAR 459A.675 through 459A.685.

(J) Any violation of a statute, rule or order relating to the opportunity to recycle.

(K) Any violation of OAR chapter 340, division 262 or other statute, rule or order relating to solid fuel burning devices, except a violation related to the sale of new or used solid fuel burning devices or the removal and destruction of used solid fuel burning devices.

(L) Any violation of an UIC system statute, rule, permit or related order by a residential owner-occupant, when the UIC disposes of stormwater, sewage or geothermal fluids.

(M) Any Violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by residential use of property disturbing less than one acre in size.

(b) The base penalty values for the \$1,000 penalty matrix are as follows:

(A) Class I:

(i) Major — \$1,000;

(ii) Moderate — \$500;

(iii) Minor — \$250.

(B) Class II:

(i) Major — \$500;

(ii) Moderate — \$250;

(iii) Minor — \$125.

(C) Class III: \$100.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468.090 - 468.140

STATUTES/OTHER IMPLEMENTED: ORS 459.995, 459A.655, 459A.660, 459A.685, 468.035

RULE TITLE: Purpose and Scope

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New rule describing the purpose and scope of division 271.

RULE TEXT:

(1) This division establishes rules and requirements for the Climate Protection Program for certain air contamination sources that emit greenhouse gases or that cause greenhouse gases to be emitted.

(2) Climate change caused by anthropogenic greenhouse gas emissions has detrimental effects on the overall public welfare of the State of Oregon. Reducing greenhouse gas emissions and mitigating climate change will improve the overall public welfare of Oregon. In particular, reducing greenhouse gas emissions will improve the welfare of environmental justice communities.

(a) Fuel combustion and industrial processes result in emissions of greenhouse gases, which are air contaminants that cause climate change;

(b) Reducing greenhouse gas emissions may also reduce emissions of other air contaminants, which may improve air quality for Oregon communities; and

(c) Environmental justice communities in Oregon are disproportionately burdened by air contamination, including through disproportionate risk of the impacts of climate change.

(3) The purposes of the Climate Protection Program are to reduce greenhouse gas emissions from sources in Oregon, achieve co-benefits from reduced emissions of other air contaminants, and enhance public welfare for Oregon communities, particularly environmental justice communities disproportionately burdened by the effects of climate change and air contamination. To support these purposes, this division:

(a) Requires that covered entities reduce greenhouse gas emissions;

(b) Supports reduction of emissions of other air contaminants that are not greenhouse gases;

(c) Prioritizes reduction of greenhouse gases and other air contaminants in environmental justice communities;

(d) Provides covered entities with compliance options to minimize disproportionate business and consumer economic impacts associated with meeting the Climate Protection Program requirements; and

(e) Allows covered fuel suppliers to comply with the Climate Protection Program requirements in part through contributing community climate investment funds to support projects that reduce greenhouse gas emissions and prioritize benefits for environmental justice communities in Oregon.

(4) DEQ administers this division in all areas of the State of Oregon and subject to the requirements in this division and OAR 340-200-0010(3), LRAPA is designated by the EQC to implement OAR 340-271-0150(3) of this division within its area of jurisdiction.

(5)(a) Whenever the DEQ Director has good cause to believe that any person is engaged or is about to engage in any acts or practices which constitute a violation of this division, the Director may authorize DEQ to institute actions or proceedings for legal or equitable remedies to enforce compliance thereto or to restrain further violations.

(b) The proceedings authorized by subsection (a) may be instituted without the necessity of prior DEQ notice, hearing and order.

(c) The provisions of this section are in addition to and not in substitution of any other civil or criminal enforcement provisions available to DEQ. This includes, without limitation, the authority to impose civil penalties and issue orders according to ORS Chapter 468.090 to 468.140 and OAR chapter 340, divisions 11 and 12.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050, 468A.135, 468.100

RULE TITLE: Definitions

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New definitions rule for division 271.

### RULE TEXT:

The definitions in OAR 340-200-0020, OAR 340-215-0020, and this rule apply to this division. If the same term is defined in this rule and either or both OAR 340-200-0020 and OAR 340-215-0020, the definition in this rule applies to this division. If the same term is defined in OAR 340-200-0020 and OAR 340-215-0020, but not in this rule, then the definition in OAR 340-215-0020 applies to this division.

(1) "Air contamination source" has the meaning given the term in ORS 468A.005. Air contamination sources include, without limitation, stationary sources, fuel suppliers, in-state producers, and local distribution companies.

(2) "Best available emissions reduction order" or "BAER order" means a DEQ order establishing required actions the owner or operator of a covered stationary source must take to limit covered emissions from the covered stationary source. The BAER order will identify the conditions and requirements that must be included in the CPP permit addendum.

(3) "Biomass-derived fuels" has the meaning given the term in OAR 340-215-0020. Biomass-derived fuels include, without limitation, biomethane, biodiesel, renewable diesel, renewable propane, woody biomass, and ethanol.

(4) "Cap" means the total number of compliance instruments generated by DEQ for each calendar year.

(5) "Climate Protection Program permit addendum" or "CPP permit addendum" means written authorization that incorporates the requirements of this division into a permit by amending an Air Contaminant Discharge Permit or a Title V Operating Permit.

(6) "Climate Protection Program permit" or "CPP permit" means a permit issued to a covered fuel supplier according to this division.

(7) "Community climate investment credit" or "CCI credit" or "credit" means an instrument issued by DEQ to track a covered fuel supplier's payment of community climate investment funds, and which may be used in lieu of a compliance instrument, as further provided and limited in this division.

(8) "Community climate investments," "community climate investment funds" or "CCI funds" means money paid by a covered fuel supplier to a community climate investment entity to support implementation of community climate investment projects and any interest that accrues on the money while it is held by a CCI entity or subcontractor.

(9) "Community climate investment entity" or "CCI entity" means a nonprofit organization that has been approved by DEQ as a CCI entity and that has entered into a written agreement with DEQ consistent with OAR 340-271-0920 to implement projects supported by community climate investment funds.

(10) "Compliance instrument" means an instrument issued by DEQ that authorizes the emission of one MT CO2e of greenhouse gases. Compliance instruments may not be divided into fractions.

(11) "Compliance obligation" means the total quantity of covered emissions from a covered fuel supplier rounded to the nearest metric ton of CO2e.

(12) "Compliance period" means a period of multiple consecutive calendar years, as described in OAR 340-271-0440.

(13) "Covered emissions" means the greenhouse gas emissions described in any of subsections OAR 340-271-

0110(3)(b), (4)(b) and (5)(b), for which covered entities may be subject to the requirements of this division.

(14) "Covered entity" means an air contamination source subject to the requirements of this division. A covered entity may be either a covered fuel supplier, a covered stationary source, or both.

- (15) "Covered fuel supplier" means an air contamination source that is either:
- (a) A fuel supplier or in-state producer as described in OAR 340-271-0110(3); or
- (b) A local distribution company as described in OAR 340-271-0110(4).

(16) "Covered stationary source" means an air contamination source described in OAR 340-271-0110(5).

(17) "Designated representative" means the person responsible for certifying, signing, and submitting any registration,

report, or form required to be submitted according to this division, on behalf of a covered entity. For the owner or operator of a covered stationary source with an Oregon Title V Operating Permit, the designated representative is the responsible official and certification must be consistent with OAR 340-218-0040(5).

(18) "Environmental justice communities" means communities of color, communities experiencing lower incomes, tribal communities, rural communities, coastal communities, communities with limited infrastructure and other communities traditionally underrepresented in public processes and adversely harmed by environmental and health hazards, including seniors, youth and persons with disabilities.

(19) "Evaluation period" means a period of multiple consecutive calendar years, as described in Table 5 in OAR 340-

271-9000, that DEQ uses to evaluate the number of compliance instruments to distribute to each covered fuel supplier that is not a local distribution company.

(20) "New source" means a source that by December 31, 2021 did not commence construction and did not submit all necessary applications to DEQ according to OAR chapter 340 divisions 210 and 216.

(21) "Nominal electric generating capacity" has the meaning given in ORS 469.300.

(22) "Shut down" means that all operations of a covered entity are permanently shut down, including but not limited to decommissioning and cancelling air permits. Permanent shutdown may include continued operations of space heaters and water heaters as necessary to support decommissioning activities.

(23) "Related entity" means any direct or indirect parent company, direct or indirect subsidiary, company that shares ownership of a direct or indirect subsidiary, or company under full or partial common ownership or control.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Acronyms

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Acronyms rule for division 271.

### RULE TEXT:

- (1) "BAER" means best available emissions reduction.
- (2) "CCI" means community climate investment.
- (3) "CFR" means Code of Federal Regulations.
- (4) "CPI-U West" means the US Bureau of Labor and Statistics West Region Consumer Price Index for All Urban

Consumers for all Items.

- (5) "CPP" means Oregon Climate Protection Program established in this division.
- (6) "DEQ" means Oregon Department of Environmental Quality.
- (7) "EQC" means Environmental Quality Commission.
- (8) "EPA" means US Environmental Protection Agency.
- (9) "IRS" means US Internal Revenue Service.
- (10) "LRAPA" means Lane Regional Air Pollution Agency.
- (11) "Metric tons of CO2e" or "MT CO2e" means metric tons of carbon dioxide equivalent.
- (12) "US" means United States.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Overview of Program Provisions for Covered Entities and CCI Entities

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Overview of Program Provisions for Covered Entities and CCI Entities rule for division 271

RULE TEXT:

(1) OAR 340-271-0100 describes general requirements for covered entities.

(2) OAR 340-271-0110 describes which air contamination sources are covered entities subject to the requirements of the CPP.

(3) OAR 340-271-0120, OAR 340-271-0130, and 340-271-0150 describe covered entity requirements including notifying DEQ of changes in ownership, operational control, and related entities; cessation of applicability; and requirements to obtain CPP permits and CPP permit addendums, respectively.

(4) OAR 340-271-0310 through OAR 340-271-0390 describe the provisions that apply to covered stationary sources.
(5) OAR 340-271-0410 through OAR 340-271-0890 and OAR 340-271-9000 describe the provisions that apply to covered fuel suppliers.

(6) OAR 340-271-0900 through OAR 340-271-0990 describe the provisions for how DEQ will approve CCI entities and how CCI entities will implement eligible projects supported by CCI funds.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Oregon Climate Protection Program Requirements

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Oregon Climate Protection Program Requirements rule for division 271

RULE TEXT:

(1) A person who owns or operates a covered entity must comply with the rules in this division. Compliance with this division does not relieve a person who owns or operates a covered entity of the obligation to comply with any other provisions of OAR chapter 340, as applicable.

(2) CPP permit or CPP permit addendum. A person who owns or operates a covered entity identified in OAR 340-271-0110 must apply for and hold a CPP permit or CPP permit addendum according to OAR 340-271-0150 that authorizes the person's covered emissions and subjects the person to the requirements of this division.

(3) Reporting. A person who owns or operates a covered entity must submit reports and attestations required in this division, as applicable.

(4) Recordkeeping. A person who owns or operates a covered entity must develop and retain all records required in this division, as applicable.

(5) A person who owns or operates a covered entity must use forms and reporting tools approved and issued by DEQ for all certifications, attestations and submissions. All submissions must be made electronically unless otherwise requested or approved by DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Covered Entity and Covered Emissions Applicability

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Covered Entity and Covered Emissions Applicability rule for division 271.

### RULE TEXT:

(1) Calculations of covered emissions, compliance obligations and distribution of compliance instruments will be based on emissions data and information in emissions data reports submitted by a person described in this rule and required according to OAR chapter 340, division 215, which may be subject to verification according to OAR chapter 340, division 272. For any person that does not submit sufficient information in compliance with OAR chapter 340, divisions 215 and 272, calculations will be informed by additional best data available to DEQ. For any person that has not registered and reported according to division 215, such calculations will be based on the best data available to DEQ, following all reporting requirements and assumptions that would be applicable had the person reported according to that division.

(2) A covered entity is subject to the requirements of this division for its covered emissions described in this rule. A person remains a covered entity until cessation is met according to OAR 340-271-0130.

(3) Applicability for fuel suppliers and in-state producers. A person is a covered fuel supplier if the person is described in subsection (a) and has annual covered emissions described in subsection (b) in any applicability determination calendar year that equal or exceed the threshold for applicability listed in Table 1 in OAR 340-271-9000. All persons that are related entities must aggregate their emissions together to determine applicability and each becomes a covered fuel supplier if applicability is met. When applicability is met, each person is a covered fuel supplier beginning with the calendar year a person becomes a covered fuel supplier, as provided in Table 1 in OAR 340-271-9000. Once a person is a covered fuel supplier, the person remains a covered fuel supplier until the person has met the cessation requirements according to OAR 340-271-0130.

(a) The person is a fuel supplier or in-state producer that imports, sells, or distributes fuel for use in Oregon, and is one or more of the following:

(A) A dealer, as that term is defined in ORS 319.010 that is subject to the Oregon Motor Vehicle and Aircraft Fuel Dealer License Tax in OAR chapter 735, division 170;

(B) A seller, as that term is defined in ORS 319.520, that is subject to the Oregon Use Fuel Tax in OAR chapter 735, division 176;

(C) A person that produces, imports, sells, or distributes gasoline or distillate fuel oil for use in Oregon and that is not subject to the Oregon Motor Vehicle and Aircraft Fuel Dealer License Tax or the Oregon Use Fuel Tax in OAR chapter 735, divisions 170 and 176; or

(D) A person that either produces propane in Oregon or imports propane for use in the state.

(b) Except as provided in paragraph (B), covered emissions include emissions described in paragraph (A).

(A) Covered emissions include emissions of anthropogenic greenhouse gases in metric tons of CO2e that would result from the complete combustion or oxidation of the annual quantity of propane and liquid fuels (including, for example and without limitation, gasoline and petroleum products) imported, sold, or distributed for use in this state.
 (B) Covered emissions do not include:

(i) Emissions that are from the combustion of biomass-derived fuels;

(ii) Emissions that are from the combustion of fuels used for aviation including, for example and without limitation, aviation gasoline, kerosene-type jet fuel, and alternative jet fuel; and

(iii) Emissions described in 40 CFR part 98 subpart W – Petroleum and Natural Gas Systems.

(4) Applicability for local distribution companies. A person is a covered fuel supplier if the person is described in subsection (a) and has annual covered emissions described in subsection (b) in 2018 or any subsequent calendar year, unless the person has met the cessation requirements according to OAR 340-271-0130.

(a) The person is a local distribution company that either produces natural gas, compressed natural gas, or liquefied

natural gas in Oregon, or that imports, sells, or distributes natural gas, compressed natural gas, or liquefied natural gas to end users in the state.

(b) Except as provided in paragraph (B), covered emissions include emissions described in paragraph (A).

(A) Covered emissions include emissions of anthropogenic greenhouse gases in metric tons of CO2e that would result from the complete combustion or oxidation of the annual quantity of natural gas imported, sold, or distributed for use in this state.

(B) Covered emissions do not include:

(i) Emissions that are from the combustion of biomass-derived fuels;

(ii) Emissions described in 40 CFR part 98 subpart W – Petroleum and Natural Gas Systems;

(iii) Emissions that result from non-combustion-related processes that use natural gas, as determined by DEQ; and

(iv) Emissions from natural gas delivered to an air contamination source that is an electric power generating plant with a total nominal electric generating capacity greater than or equal to 25 megawatts.

(5) Applicability for stationary sources. A person is a covered stationary source if the person is described in subsection

(a), unless the person has met the cessation requirements according to OAR 340-271-0130.

(a) The person is either or both of the following:

(A) The person owns or operates an existing source required to obtain either a Title V Operating Permit or an Air Contaminant Discharge Permit and that has annual covered emissions described in subsection (b) that equal or exceed 25,000 MT CO2e in 2018 or in any subsequent calendar year; or

(B) The person owns or operates a new source, or proposes to own or operate a new source, required to obtain either or both a Title V Operating Permit or an Air Contaminant Discharge Permit and that has a potential to emit annual covered emissions described in subsection (b) that will equal or exceed 25,000 MT CO2e in any calendar year.

(b) Except as provided in paragraph (B), covered emissions include emissions described in paragraph (A).

(A) Covered emissions include emissions of anthropogenic greenhouse gases in metric tons of CO2e that are from either or both processes or the combustion of solid or gaseous fuels, including emissions from combustion for both

energy production and processes.

(B) Covered emissions do not include:

(i) Emissions that are from the combustion of biomass-derived fuels;

(ii) Biogenic CO2 emissions from solid fuels;

(iii) Emissions that are from the combustion of liquid fuels or propane;

(iv) Emissions from natural gas, compressed natural gas, or liquefied natural gas used on-site that was delivered by a local distribution company;

(v) Emissions described in 40 CFR part 98 subpart HH – Municipal Solid Waste Landfills;

(vi) Emissions described in 40 CFR part 98 subpart TT – Industrial Waste Landfills;

(vii) Emissions from an air contamination source that is owned or operated by an interstate natural gas pipeline that is operating under authority of a certificate of public convenience and necessity issued by the Federal Energy Regulatory Commission; and

(viii) Emissions from an air contamination source that is an electric power generating plant with a total nominal electric generating capacity greater than or equal to 25 megawatts.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Changes in Covered Entity Ownership and Changes to Related Entities

#### NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Changes in Covered Entity Ownership and Changes to Related Entities rule for division 271.

#### RULE TEXT:

(1) Changes in ownership or operational control.

(a) If a covered entity undergoes a change in ownership or operational control, the new person that owns or operates the covered entity must notify DEQ in writing within 30 days of the ownership or operational control change. The person must submit a complete and accurate notification, including providing the following information:

(A) The name of the previous owner or operator;

(B) The name of the new owner or operator;

(C) The date of ownership or operator change;

(D) Name of the designated representative;

(E) Information about each person that was a related entity prior to the change in ownership or operational control, subject to any regulations in OAR chapter 340, including legal name, full mailing address, and whether each is a covered fuel supplier and holds a CPP permit; and

(F) Information about each person that is a related entity after the change in ownership or operational control, subject to any regulations in OAR chapter 340, including legal name, full mailing address, and whether each is a covered fuel supplier and holds a CPP permit.

(b) The covered entity continues to be a covered entity following a change in ownership or operational control, until it meets the cessation requirements in OAR 340-271-0130. Any other covered entity that was a related entity also continues to be a covered entity following the change in ownership or operational control, until it meets the cessation according to OAR 340-271-0130.

(c) Following a change in ownership or operational control, a covered fuel supplier that holds a compliance instrument or CCI credit according to OAR 340-271-0430 or OAR 340-271-0830 continues to hold the compliance instrument or CCI credit according to each rule, as applicable.

(2) Changes to related entities of covered fuel suppliers.

(a) If a person subject to any regulations in OAR chapter 340 becomes a new related entity to a covered fuel supplier due to a change in ownership or operational control, the designated representative of the covered fuel supplier must notify DEQ in writing within 30 days of the ownership or operational control change. The designated representative must submit a complete and accurate notification, including providing the following information:

(A) Information about the new related entity, including legal name, full mailing address, and whether the person is a covered fuel supplier and holds a CPP permit;

(B) The name of the previous owner or operator of the new related entity;

(C) The name of the new owner or operator of the new related entity;

(D) The date of ownership or operator change for the new related entity; and

(E) Information about all other related entities subject to any regulations in OAR chapter 340, including legal names, full mailing addresses, and whether each is a covered fuel supplier and holds a CPP permit.

(b) If the person that is the new related entity to a covered fuel supplier identified in paragraph (a)(A) is not already a covered fuel supplier, the person:

(A) Becomes a covered fuel supplier beginning with the date of ownership or operator change;

(B) Must apply to DEQ for a CPP permit according to OAR 340-271-0150(1)(a)(B); and

(C) If the person is a covered fuel supplier, the person will have compliance obligations beginning with covered emissions from the calendar year in which the ownership or operator change occurred.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Cessation of Covered Entity Applicability

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Cessation of Covered Entity Applicability rule for division 271.

## RULE TEXT:

(1) Cessation for covered fuel suppliers.

(a) A person that is a covered fuel supplier as described in OAR 340-271-0110 remains a covered fuel supplier until the person receives written notification from DEQ after either or both:

(A) The person's annual covered emissions are 0 (zero) MT CO2e for six consecutive calendar years; or

(B) The person was designated a covered fuel supplier in OAR 340-271-0110(3) and its annual covered emissions are less than 25,000 MT CO2e for six consecutive calendar years and the person applies to DEQ according to subsection (c).
(b) After a covered fuel supplier identified according to paragraph (a)(A) demonstrates compliance with compliance obligations for the years up to and including the years described in paragraph (a)(A), DEQ will notify the designated representative of the covered fuel supplier in writing that cessation is met.

(c) In order for cessation according to paragraph (a)(B) to take effect, a covered fuel supplier must apply to cease being a covered fuel supplier by submitting the following information to DEQ on a form approved by DEQ:

(A) Information about the covered fuel supplier, including:

(i) Name and full mailing address, and website; and

(ii) Designated representative's contact information including name, title or position, phone number, and email address;
(B) Information about each related entity subject to any regulations in OAR chapter 340 for each of the six consecutive calendar years, including legal name, full mailing address, and whether each is a covered fuel supplier and holds a CPP permit;

(C) Information about remaining requirements that must be met according to this division at the time the application is submitted to DEQ; and

(D) The following attestation, signed by the designated representative of the covered fuel supplier:

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief, the information provided in this form is true, accurate, and complete. [Covered fuel supplier] meets the eligibility for cessation as a covered fuel supplier according to Oregon Administrative Rules chapter 340, division 271. I understand that ceasing to be a covered fuel supplier means that [covered fuel supplier] will also cease to hold any compliance instruments and CCI credits.

(d) After the covered fuel supplier applying for cessation according to paragraph (a)(B) and subsection (c) demonstrates compliance with compliance obligations for the years up to and including the years described in paragraph (a)(B), DEQ will notify the designated representative of the covered fuel supplier in writing that the application for cessation is approved and that cessation is met.

(e) A person that ceases to be a covered fuel supplier according to this section must comply with all remaining applicable recordkeeping requirements of this division from the last date on which the person was a covered fuel supplier.

(f) When a person ceases to be a covered fuel supplier:

(A) The cessation does not change the compliance obligation for any year for which the person has already demonstrated compliance;

(B) Any remaining compliance instruments held by the person will be retired, held in reserve, or distributed by DEQ according to OAR 340-271-0430(3); and

(C) Any remaining community climate investment credits held by the person will be canceled according to OAR 340-271-0830(1)(c).

(2) Cessation for covered stationary sources.

(a) A person that is a covered stationary source as described in OAR 340-271-0110 remains a covered stationary source until either of the following occur:

(A) The person's operations are changed such that all greenhouse gas emitting processes and operations cease to operate or are shut down. In order for cessation to take effect, the person must submit a written notification to DEQ certifying the cessation of all greenhouse gas emitting processes and operations; or

(B) The person's covered emissions are less than 25,000 MT CO2e for five consecutive calendar years and the person has fully complied with any applicable BAER order and any related reporting requirements and has submitted any remaining required BAER assessment and five-year BAER report. In order for cessation to take effect, DEQ will notify the covered stationary source that cessation is met.

(b) This section does not apply to seasonal operational cessations or other temporary cessation of operations.

(c) A person that ceases to be a covered stationary source according to this section must comply with all remaining applicable recordkeeping requirements of this division from the last date on which the person was a covered stationary source.

(3) Any person that ceases to be a covered entity according to this rule must resume meeting the requirements of this division for any future year in which applicability is met.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Covered Entity Permit Requirements

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Covered Entity Permit Requirements rule for division 271.

## RULE TEXT:

(1) A person described in either or both OAR 340-271-0110(3) or (4) must apply for a CPP permit as provided in this section.

(a) The person must apply for a CPP permit according to subsections (b) and (c) by the following deadlines:

(A) If DEQ notifies the person in writing that the person is a covered fuel supplier, then the person must apply to DEQ for a CPP permit within 30 days of the notification or by another date DEQ specifies in the notification that is at least 30 days after the date of the notification;

(B) If DEQ does not provide a notification according to paragraph (A), then the person must apply to DEQ for a CPP permit by whichever is later of:

(i) February 14 of the calendar year a person becomes a covered fuel supplier; or

(ii) March 31 of the year after the first applicability determination calendar year that the person's emissions equal or exceed the threshold in Table 1 in OAR 340-271-9000; or

(C) If there was a change in ownership or operational control according to OAR 340-271-0120(2), then the person must apply to DEQ for a CPP permit within 45 days of the change in ownership or operational control.

(b) A person that submits a CPP permit application to DEQ must submit a complete and accurate application. The application for a CPP permit must be submitted to DEQ using a form approved by DEQ and include:

(A) Identifying information about the covered fuel supplier including name, full mailing address, and website, and designated representative's contact information including name, title or position, phone number, and email address;
(B) Information about each related entity subject to any regulations in OAR chapter 340, including legal name, full mailing address, and whether each is a covered fuel supplier and holds a CPP permit; and

(C) The following attestation, signed by the designated representative of the person considered a covered fuel supplier;

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief, the information provided in this form is true, accurate, and complete. [Covered entity] meets the Climate Protection Program applicability requirements described in OAR 340-271-0110 and requests a permit with the understanding that [covered entity] must comply with such permit as provided in Oregon Administrative Rules chapter 340, division 271.

(c) DEQ may issue a CPP permit to a covered fuel supplier that submits a complete and accurate application. The permit may contain all applicable provisions of this division and such other conditions as DEQ determines are necessary to implement, monitor and ensure compliance with this division.

(2) The owner or operator of a new source that is a covered stationary source may not emit any covered emissions prior to being issued a BAER order and a permit according to subsection (3)(c) and OAR 340-271-0330(1).

(3) The owner or operator of a covered stationary source required to apply for a CPP permit addendum according to OAR 340-271-0330(1) must submit a complete and accurate application to DEQ or LRAPA, as applicable, that complies with and includes information identified in this section.

(a) The application must include the following:

(A) Identifying information about the covered stationary source, including name and the name of the person that owns or operates the covered stationary source, full mailing address, the physical address of the covered stationary source, and a description of the nature of business being operated, the name, phone number and email address of the designated representative who is responsible for compliance with the permit, the permit number for an existing source, and the SIC or NAICS code of the covered stationary source;

(B) The name of a person authorized to receive requests from DEQ for additional data and information;

(C) The date DEQ notified the owner or operator of the covered stationary source of the BAER order established according to OAR 340-271-0320;

(D) A BAER implementation plan that includes the following:

(i) Identification of the actions that the owner or operator of the covered stationary source will take to comply with the BAER order; and

(ii) The schedule for implementing the requirements in the BAER order, consistent with any deadlines provided by DEQ in the BAER order, if applicable, and including an estimate of when all requirements from the BAER order will be completed;

(E) Any other information requested by DEQ; and

(F) The following attestation, signed by the designated representative of the covered stationary source;

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief, the information provided in this form is true, accurate, and complete. [Covered entity] meets the Climate Protection Program applicability requirements described in OAR 340-271-0110 and requests a permit with the understanding that [covered entity] must comply with such permit as provided in Oregon Administrative Rules chapter 340, division 271.

(b) DEQ or LRAPA, as applicable, may issue a CPP permit addendum to the owner or operator of a covered stationary source that submits a complete and accurate permit modification application consistent with the requirements of OAR chapter 340, divisions 216 and 218, as applicable. The CPP permit addendum will be issued as a Category I permit action according to OAR chapter 340, division 209. A CPP permit addendum will amend the covered stationary source's Air Contaminant Discharge Permit or Title V Operating Permit until the requirements in the addendum can be incorporated into the operating permit. The CPP permit addendum may contain all applicable provisions of this division and such other conditions as DEQ or LRAPA, as applicable, determines are necessary to implement, monitor and ensure compliance with the permit and this division.

(c) If DEQ or LRAPA approves an application for an Air Contaminant Discharge Permit or Title V Operating Permit submitted by the owner or operator of a new source, then DEQ or LRAPA, as applicable, will incorporate the CPP conditions into the new operating permit and will not issue a separate CPP permit addendum. Such CPP conditions may contain all applicable provisions of this division and such other conditions as DEQ or LRAPA, as applicable, determines are necessary to implement, monitor and ensure compliance with the permit and this division.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.135

RULE TITLE: Best Available Emissions Reduction Assessments for Covered Stationary Sources

#### NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Best Available Emissions Reduction Assessments for Covered Stationary Sources rule for division 271.

RULE TEXT:

(1) Requirement to conduct a BAER assessment.

(a) When notified in writing by DEQ, the owner or operator of a covered stationary source described in OAR 340-271-0110(5)(a)(A) must submit a complete and accurate BAER assessment according to this rule. The owner or operator of the covered stationary source must submit a complete BAER assessment to DEQ not later than nine months following the date of DEQ's notice, unless DEQ has identified a later deadline in its notice or DEQ approves an extension according to section (6).

(b) The owner or operator of a new or proposed covered stationary source described in OAR 340-271-0110(5)(a)(B) must submit a complete and accurate BAER assessment completed according to this rule with its permit application submitted according to OAR chapter 340, division 216, or its notice of construction application submitted according to OAR chapter 340, division 216, or its notice of construction application submitted according to OAR chapter 340.

(2) BAER assessment requirements. BAER assessments submitted to DEQ must include the following:

(a) A description of the covered stationary source's production processes and a flow chart of each process;

(b) Identification of all fuels, processes, equipment, and operations that contribute to the covered stationary source's covered emissions, including:

(A) Estimates of annual average covered emissions identified in OAR 340-271-0110(5)(b). For existing covered stationary sources, estimates must be of current annual average covered emissions. For new sources, estimates must be of anticipated annual average covered emissions. Emissions must be identified in MT CO2e, following methodologies identified in OAR chapter 340, division 215. This must also include and distinguish quantities and covered emissions of each fuel used to control air contaminants that are not greenhouse gases; and

(B) Estimates of current annual average type and quantity of all fuels used by the covered stationary source, and anticipated annual average fuel usage for new sources;

(c) Identification and description of all available fuels, processes, equipment, technology, systems, actions, and other strategies, methods and techniques for reducing covered emissions described in OAR 340-271-0110(5)(b). Strategies considered must include but are not limited to the strategies used by other sources in this state or in other jurisdictions that produce goods of comparable type, quantity, and quality; and

(d) An assessment of each of the following for each strategy identified in subsection (c):

(A) An estimate of annual average covered emissions reductions achieved if the strategy were implemented compared to the emissions estimated in paragraph (b)(A);

(B) Environmental and health impacts, both positive and negative, if the strategy were implemented, including any impacts on air contaminants that are not greenhouse gases and impacts to nearby communities;

(C) Energy impacts if the strategy were implemented, including whether and how the strategy would change energy consumption at the covered stationary source, including impacts related to any fuel use that results in anthropogenic greenhouse gas emissions. Any energy-related costs must be included in the economic impacts assessment in paragraph (D), not the energy impacts assessment;

(D) Economic impacts if the strategy were implemented, including operating costs and the costs of changing existing processes or equipment or adding to existing processes and equipment. Any energy-related costs must be included in the economic impacts assessment, not the energy impacts assessment in paragraph (C). The economic impacts assessment must include both costs and cost savings (benefits);

(E) An estimate of the time needed to fully implement the strategy at the covered stationary source; and

(F) A list of the information, resources, and documents used to support development of the BAER assessment, including,

if available, links to webpages that provide public access to supporting documents.

(3) Upon receipt of a BAER assessment described in section (2), DEQ will review the submittal and if DEQ determines that any additional information, corrections, or updates are required then DEQ may provide the owner or operator of the covered stationary source with a written request to provide such information by a certain date or DEQ may issue the BAER order based on the information it has available. If DEQ requests that the owner or operator of the covered stationary source revise its BAER assessment according to this section, the owner or operator must provide such information no later than the deadline provided by DEQ.

(4) Five year BAER reports.

(a) Every five years following the date that DEQ issued a BAER order, the owner or operator of a covered stationary source must submit to DEQ a five year BAER report that includes an update of the information described in subsections (2)(a) through (c).

(b) If one or more new strategies are identified in a five year BAER report required in subsection (a) that have not previously been evaluated in a BAER assessment, DEQ may notify the owner or operator of the covered stationary source and require that it conduct a complete BAER assessment according to section (2) and submit it to DEQ. Such complete BAER assessment must also include:

(A) Evaluation of any new strategies identified and any previously identified strategies using any new information available at the time the assessment is being conducted; and

(B) Current status and analysis of the implementation of requirements in any prior BAER order(s).

(5) When notified in writing by DEQ, the owner or operator of a covered stationary source identified in section (1) may be required to conduct and submit an updated complete BAER assessment conducted according to this rule, in accordance with the following:

(a) DEQ may not require the owner or operator of a covered stationary source to complete an updated BAER assessment within five years of the date of submission of the most recently completed BAER assessment. However, if DEQ determines the owner or operator of a covered stationary source submitted information that it knew or should have known was false, inaccurate, or incomplete to DEQ, then DEQ may require the owner or operator of the covered stationary source to complete an updated BAER assessment within five years of the date of submission of the most recently completed BAER assessment;

(b) The updated BAER assessment must include assessment of new strategies and previously identified strategies and any new information available at the time the assessment is being conducted;

(c) The owner or operator of the covered stationary source must include current status and analysis of the implementation of requirements in any prior BAER order; and

(d) The owner or operator of the covered stationary source must submit the updated BAER assessment to DEQ not later than nine months following the date of DEQ's notice, unless DEQ has identified a later deadline in the notice or DEQ approves an extension according to section (6).

(6) The owner or operator of a covered stationary source required to conduct a BAER assessment as described in sections (1) or (5) may request an extension of time to complete the BAER assessment by providing DEQ with a written request no fewer than 30 days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:

(a) The owner or operator of the covered stationary source has demonstrated progress in completing the submittal; and
(b) A delay is necessary, for good cause shown by the owner or operator of the covered stationary source, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the BAER assessment.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: DEQ Best Available Emissions Reduction Order

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New DEQ Best Available Emissions Reduction Order for division 271.

RULE TEXT:

(1) DEQ may issue a BAER order for each owner or operator of a covered stationary source that must submit a BAER assessment as provided in OAR 340-271-0310. A BAER order will establish the actions that the owner or operator of a covered stationary source must take to reduce covered emissions and the timeline on which the actions must be taken.
 (2) In establishing the requirements in a BAER order for a covered stationary source, DEQ may consider any information it deems relevant, and must consider the following:

(a) Information submitted in a BAER assessment;

(b) The fuels, processes, equipment, technology, systems, actions, and other strategies, methods and techniques that maximize covered emissions reductions;

(c) The fuels, processes, equipment, technology, systems, actions, and other strategies, methods and techniques for reducing covered emissions used by sources in this state or in other jurisdictions that produce goods of comparable type, quantity, and quality;

(d) A reasonable schedule and amount of time necessary to implement a strategy under consideration by DEQ to reduce covered emissions;

(e) Environmental, public health, and energy impacts of a strategy under consideration by DEQ to reduce covered emissions, including but not limited to air quality impacts for nearby communities and impacts related to switching to cleaner energy resources, zero-emissions energy resources, or renewable fuels;

(f) Economic impacts of a strategy under consideration by DEQ to reduce covered emissions including, but not limited to, costs so great that a new source could not be built or an existing source could not be operated, and cost-

effectiveness of different strategies that would achieve similar covered emissions reductions;

(g) Processes and operations currently in use by and at the covered stationary source and the remaining useful life of the covered stationary source;

(h) Whether a strategy under consideration by DEQ to reduce covered emissions is achievable, technically feasible, commercially available, and cost-effective;

(i) Whether a strategy under consideration by DEQ to reduce covered emissions has an impact on the type or quality of good(s) produced by and at the covered stationary source, if applicable; and

(j) Input from the public and community organizations from nearby the covered stationary source.

(3) For the owner or operator of a covered stationary source required to register and report according to OAR chapter 340, division 215, DEQ will consider emissions data reports to assess whether covered emissions reductions are being achieved when establishing the requirements in a BAER order or for determining when to notify the owner or operator of a covered stationary source to conduct and submit an updated complete BAER assessment as described in OAR 340-271-0310(5).

(4) DEQ may verify information submitted in a BAER assessment.

(5) DEQ may consult with industry experts and third-party organizations before issuing a BAER order.

(6) DEQ will notify the owner or operator of a covered stationary source of a BAER order in writing. A BAER order is effective 30 days from the date of the notification unless, within that time, DEQ receives a written request for a hearing from the owner or operator of the covered stationary source according to section (7).

(7) The owner or operator of a covered stationary source may file with DEQ a written request for a contested case hearing to challenge a BAER order issued according to section (6). The request must be filed in writing within 30 days of the date that DEQ issued the BAER order and must state the grounds for the request. The hearing will be conducted as a contested case hearing in accordance with ORS 183.413 through 183.470 and OAR chapter 340, division 11.

(8) DEQ will provide a public status update if DEQ has not yet issued a BAER order after 18 months of the date on which

DEQ notified the owner or operator of a covered stationary source that it must conduct a BAER assessment.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Compliance with a BAER Order

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Compliance with a BAER Order rule for division 271.

RULE TEXT:

(1) The owner or operator of a covered stationary source for which DEQ has issued a BAER order according to OAR 340-271-0320 must:

(a) Comply with the requirements in the BAER order; and

(b) Submit to DEQ or LRAPA, as applicable, a complete application for a CPP permit addendum according to OAR 340-271-0150(3) not later than 30 days after the date that the BAER order is final and effective.

(2) Reporting requirements.

(a) The owner or operator of a covered stationary source that has been issued a CPP permit addendum or operating permit that includes provisions related to a BAER order must submit an annual progress report to DEQ describing the progress in implementing the requirements in the BAER order. The annual progress reports are due to DEQ on or before February 15 of each year following the date that the notice of the BAER order is final and effective. The annual progress report must include:

(A) A description of the progress achieved in implementing the requirements in any BAER order;

(B) A schedule indicating dates for future increments of progress;

(C) A description of any increases or decreases in covered emissions that have occurred at the covered stationary source since the submission date of the most recently conducted complete BAER assessment; and

(D) An estimate of when all implementation of requirements of the BAER order will be complete.

(b) The owner or operator of a covered stationary source must submit a BAER order completion report to DEQ no later than 60 days after implementation of all requirements in the BAER order are complete, except for items related to continuous and ongoing requirements. The report must include:

(A) The final increments of progress achieved in fully implementing the requirements in the BAER order and the date the final increments of progress were achieved;

(B) A summary of the actions taken to fully implement the requirements in the BAER order; and

(C) An estimate of the resulting covered emissions reductions that will be achieved now that the requirements in the BAER order are being implemented.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Recordkeeping Requirements Related to BAER

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Recordkeeping Requirements Related to BAER rule for division 271.

RULE TEXT:

(1) Recordkeeping requirements related to BAER assessments and five year BAER reports.

(a) The owner or operator of a covered stationary source that submits any information to DEQ related to a complete BAER assessment or five year BAER report conducted according to OAR 340-271-0310 must retain the following records, in paper or electronic format, for a period of at least ten years from the date the information is submitted to DEQ:

(A) A copy of the assessment or report submitted to DEQ;

(B) Any contract(s) with any independent third-party(ies) in relation to developing the assessment or report; and

(C) All other information and documentation used to support and inform development of the assessment or report.

(b) The owner or operator of the covered stationary source must make available to DEQ upon request all of the records it is required to retain according to this section. DEQ will specify the date by which the owner or operator of the covered stationary source must fulfill a records request from DEQ.

(2) Recordkeeping requirements related to compliance with a BAER order.

(a) The owner or operator of a covered stationary source issued a BAER order must retain the following records, in paper or electronic format, for a period of at least ten years from the applicable date specified below:

(A) All records and information related to a BAER order including but not limited to a copy of the most recently submitted complete BAER assessment and a copy of DEQ's written BAER order from the effective date of the BAER order;

(B) A copy of the permit modification application for the CPP permit addendum or the applicable permit application from the date it is submitted to DEQ;

(C) A copy of each progress report from the date it is submitted to DEQ; and

(D) All other information and documentation related to actions taken to comply with requirements in a BAER order from the effective date of the BAER order.

(b) The owner or operator of a covered stationary source issued a BAER order must make available to DEQ upon request all of the records it is required to retain according to this section. DEQ will specify the date by which the owner or operator of the covered stationary source must fulfill a records request from DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Generation of Compliance Instruments

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Generation of Compliance Instruments rule for division 271.

RULE TEXT:

(1) Each year, DEQ will generate the number of compliance instruments equal to the cap for the calendar year identified in Table 2 in OAR 340-271-9000.

(2) A compliance instrument is a regulatory instrument and does not constitute personal property, a security or any other form of property.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Distribution of Compliance Instruments to Covered Fuel Suppliers

#### NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Distribution of Compliance Instruments to Covered Fuel Suppliers rule for division 271.

### RULE TEXT:

(1) DEQ will distribute compliance instruments according to this rule. DEQ will distribute compliance instruments from a cap according to sections (2) through (4) no later than March 31 of the calendar year of that cap.
(2) Annual distribution of compliance instruments to covered fuel suppliers that are local distribution companies. DEQ will annually distribute to each local distribution company, or to its successor(s) due to a change in ownership or operation, the number of compliance instruments from the calendar year's cap stated in Table 4 in OAR 340-271-9000.
(3) DEQ will establish a compliance instrument reserve for covered fuel suppliers that are new to the program and are not local distribution companies. DEQ will hold, according to subsection (4)(a), a subset of compliance instruments in the reserve from the caps identified in Table 2 in OAR 340-271-9000. Once a compliance instrument is held in the reserve, it remains in the reserve until DEQ determines, at its discretion, to undertake one of the following actions:
(a) DEQ distributes the compliance instrument according to section (5) to a covered fuel supplier that is not a local distribution company;

(b) DEQ retires the compliance instrument because the compliance instrument reserve exceeds the size described in Table 3 OAR 340-271-9000, provided that after such retirement the size of the compliance instrument reserve will equal or exceed the reserve size described in Table 3; or

(c) DEQ distributes the compliance instrument to a covered fuel supplier that is not a local distribution company because the size of the compliance instrument reserve exceeds the reserve size described in Table 3 in OAR 340-271-9000. DEQ will only distribute compliance instruments from the reserve according to this subsection if there are at least 10,000 compliance instruments to distribute and if the remaining size of the reserve after this distribution will equal or exceed the reserve size described in Table 3 in OAR 340-271-9000. DEQ will calculate the number of compliance instruments to distribute to each covered fuel supplier that is not a local distribution company according to section (4)(b), except "total compliance instruments to distribute" means the total number of compliance instruments DEQ is distributing from the reserve according to this subsection.

(4) Annual distribution of compliance instruments to covered fuel suppliers that are not local distribution companies. DEQ will annually distribute compliance instruments from the applicable calendar year's cap to covered fuel suppliers that are not local distribution companies as follows:

(a) If the size of the compliance instrument reserve is less than the reserve size described in Table 3 in OAR 340-271-9000 for the calendar year, then DEQ will calculate the difference and hold in the compliance instrument reserve that quantity of compliance instruments. Otherwise, the number of compliance instruments in the reserve will not be changed.

(b) Except for compliance instruments identified in Table 4 in OAR 340-271-9000 for distribution according to section (2) and the compliance instruments held in the reserve according to section (3) and subsection (4)(a), DEQ will calculate the number of compliance instruments to distribute to each covered fuel supplier that is not a local distribution company as described in this subsection, based on available information from the evaluation period described in Table 5 in OAR 340-271-9000. If a covered fuel supplier or its related entities do not have available information for one or more of the years of the evaluation period, DEQ may exclude the covered fuel supplier and its emissions from this calculation. If the covered fuel supplier is excluded, then the distribution for the covered fuel supplier will be addressed using the methodology described in section (5).

(A) DEQ will use the following formula to calculate the number of compliance instruments to distribute to each covered fuel supplier:

Number of Compliance Instruments = Total compliance instruments to distribute \* ([Covered fuel supplier covered

emissions + covered fuel supplier biofuel emissions] / Total emissions)

(B) As used in the formula in paragraph (A):

(i) "Total compliance instruments to distribute" means the cap for the calendar year, according to Table 2 in OAR 340-271-9000, minus the number of compliance instruments identified in Table 4 in OAR 340-271-9000; and minus the number of compliance instruments held in the compliance instrument reserve;

(ii) "Covered fuel supplier covered emissions" means the sum of a covered fuel supplier's covered emissions during the evaluation period;

(iii) "Covered fuel supplier biofuel emissions" means emissions described in OAR 340-271-0110(3)(b)(B)(i) that result from the complete combustion or oxidation of the annual quantity of biomass-derived fuels that the covered fuel supplier imported, sold, or distributed for use in the state during the evaluation period; and

(iv) "Total emissions" means the sum of "covered fuel supplier covered emissions" and "covered fuel supplier biofuel emissions" during the evaluation period for all covered fuel suppliers whose compliance instrument distribution is calculated according to this section.

(C) DEQ will distribute a number of compliance instruments to each covered fuel supplier using the formula in paragraph (A) and rounded down to the nearest whole number.

(D) Any remaining compliance instruments not distributed due to rounding will be held in the compliance instrument reserve.

(5) Distribution from compliance instrument reserve for new covered fuel suppliers that are not local distribution companies.

(a) A covered fuel supplier is eligible for a distribution from the compliance instrument reserve if it is not a local distribution company and if:

(A) The covered fuel supplier was excluded from the distribution in section (4) due to a lack of sufficient available information; or

(B) The person becomes a covered fuel supplier after DEQ has distributed the compliance instruments for that year according to section (4).

(b) A covered fuel supplier identified according to subsection (a) may request a distribution of compliance instruments from the reserve by submitting an application to DEQ, on a form approved by DEQ, that includes the information described in paragraphs (A) through (D). The covered fuel supplier must submit a separate application for each year for which it is seeking distribution of compliance instruments from the reserve.

(A) Information about the covered fuel supplier, including:

(i) Name and full mailing address; and

(ii) Designated representative's contact information including name, title or position, phone number, and email address;

(B) The calendar year of covered emissions for which compliance instruments are requested;

(C) The reason for the request, including description of eligibility according to subsection (a); and

(D) The following attestation, signed by the designated representative of the covered fuel supplier:

I certify under penalty of perjury under the laws of the State of Oregon that I am a representative of [covered fuel supplier], am authorized to submit this application on its behalf, and that, to the best of my knowledge and belief, the information provided in this form is true, accurate, and complete. [Covered fuel supplier] is a covered fuel supplier in the year indicated in this application and requests compliance instruments from the reserve according to the information included in this application.

(c) DEQ will review an application submitted according to subsection (b) to ensure that it meets the requirements of this section. DEQ will inform the applicant either that the submitted application is complete or that additional specific information is required to make the application complete. If the application is incomplete, DEQ will not consider the application further until the applicant provides the additional information requested by DEQ.

(d) If DEQ approves an application, DEQ may distribute one or more compliance instruments to the covered fuel supplier from the reserve. In determining the number of compliance instruments to distribute from the reserve to the covered fuel supplier, DEQ may consider:

(A) The number of compliance instruments the covered fuel supplier might have received according to section (4) if DEQ had sufficient available information to include the covered fuel supplier in that calculation;

(B) The number of compliance instruments in the reserve at that time;

(C) A maximum distribution amount that will not exceed the covered fuel supplier's covered emissions in that year; and (D) A maximum distribution amount that will not exceed 300,000 compliance instruments per covered fuel supplier per year.

(6) Upon distribution of compliance instruments according to sections (2), (4), and (5), DEQ will notify the designated representative of each covered fuel supplier in writing of the availability of compliance instruments.

(7) DEQ will track distributed compliance instruments.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Holding Compliance Instruments

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Holding Compliance Instruments rule for division 271.

RULE TEXT:

When DEQ distributes a compliance instrument to a covered fuel supplier according to OAR 340-271-0420 or when a covered fuel supplier acquires a compliance instrument according to OAR 340-271-0500, the covered fuel supplier may continue to hold the compliance instrument until any of the following apply:

(1) The covered fuel supplier uses the compliance instrument toward its demonstration of compliance with a compliance obligation according to OAR 340-271-0450;

(2) The covered fuel supplier transfers the compliance instrument to another covered fuel supplier according to OAR 340-271-0500; or

(3) The covered fuel supplier has ceased being a covered fuel supplier according to OAR 340-271-0130. When this occurs, DEQ may, at its discretion:

(a) Retire the compliance instrument; or

(b) If the covered fuel supplier is not a local distribution company:

(A) Hold the compliance instrument in the compliance instrument reserve described in OAR 340-271-0420(3); or
(B) Distribute the compliance instrument to a covered fuel supplier that is not a local distribution company. DEQ will only distribute the compliance instrument if there are at least 10,000 compliance instruments to distribute. DEQ will calculate the number of compliance instruments to distribute to each covered fuel supplier according to OAR 340-271-0420(4)(b), except "total compliance instruments to distribute" means the total number of compliance instruments DEQ is distributing according to this paragraph.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Compliance Periods

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Compliance Periods rule for division 271.

RULE TEXT:

(1) Each compliance period is three consecutive calendar years.

(2) The first compliance period begins with calendar year 2022, and includes calendar years 2023 and 2024.

(3) A new compliance period begins with the calendar year following the last calendar year of the preceding compliance period.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Demonstration of Compliance

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Demonstration of Compliance rule for division 271.

## RULE TEXT:

(1) DEQ will determine a covered fuel supplier's total compliance obligation for a compliance period as the sum of the covered fuel supplier's annual compliance obligation(s) for each year of the compliance period. DEQ will base its determinations on emissions calculated according to OAR 340-271-0110(1). DEQ will notify the covered fuel supplier of its determination.

(2) A covered fuel supplier must demonstrate compliance according to this rule by November 28 of the year following the end of each compliance period, or 25 days after DEQ's notification described in section (1), whichever is later.
(3) To demonstrate compliance for a compliance period, a covered fuel supplier must submit the following to DEQ:

(a) For each metric ton of CO2e of the total compliance obligation, either a compliance instrument or a CCI credit, subject to the following limitations:

(A) A covered fuel supplier may only submit compliance instruments that DEQ distributed from the caps for the calendar years of the applicable compliance period or from caps for earlier compliance periods; and

(B) The quantity of CCI credits used to demonstrate compliance as a percentage of the total compliance obligation for the applicable compliance period may not exceed the allowable percentage specified in Table 6 in OAR 340-271-9000.(b) A demonstration of compliance form, approved by DEQ that includes:

(A) Name and full mailing address of the covered fuel supplier;

(B) Designated representative's contact information including name, title or position, phone number, and email address;(C) Identification of the compliance period and calendar year(s) for which the covered fuel supplier is demonstrating compliance;

(D) The total compliance obligations in metric tons of CO2e for the compliance period and listed separately for each calendar year in the compliance period;

(E) The total number of compliance instruments the covered fuel supplier is submitting to DEQ to demonstrate compliance, and separately the total number submitted from each calendar year's cap;

(F) The total number of CCI credits the covered fuel supplier is submitting to DEQ to demonstrate compliance; and (G) The following attestation, signed by the designated representative of the covered fuel supplier:

I certify under penalty of perjury under the laws of the State of Oregon that I am a representative of [covered fuel supplier], am authorized to submit this report on its behalf, and that, to the best of my knowledge and belief, the information provided in this form is true, accurate, and complete. It is the intent of [covered fuel supplier] to use the quantity of compliance instruments and credits listed on this form and submitted to DEQ for the demonstration of compliance. I certify that [covered fuel supplier] has not exceeded the allowable use of CCI credits. If any portion of these compliance obligations remain unmet after this submission, I understand that [covered fuel supplier] must still demonstrate compliance with the remaining portion and may be subject to enforcement action.

(4) Each metric ton of CO2e of a compliance obligation for which a covered fuel supplier does not demonstrate compliance according to this rule is a separate violation of this division.

(5) If a change in ownership of a covered fuel supplier occurs, the person that owns or operates the covered fuel supplier as of December 31 in the final year of a compliance period is responsible for demonstration of compliance according to this rule for each annual compliance obligation during the compliance period. Compliance obligations may not be split or subdivided based on ownership changes during the compliance period or during any year within the compliance period.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Recordkeeping Requirements Related to Demonstration of Compliance

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Recordkeeping Requirements Related to Demonstration of Compliance rule for division 271.

RULE TEXT:

(1) A person must retain the following records necessary for determining compliance obligations, in paper or electronic format, for a period of at least seven years beginning September 30 of the year following a year in which covered emissions occurred:

(a) Records according to the recordkeeping requirements of OAR chapter 340, divisions 215 and 272, as applicable;

(b) Copies of reports and forms submitted to DEQ related to determination of compliance obligations according this division and OAR chapter 340, divisions 215 and 272, including but not limited to:

(A) Applicable emissions data reports submitted according to OAR chapter 340, division 215; and

(B) Applicable verification statements submitted according to OAR chapter 340, division 272; and

(c) All other information and documentation used to calculate and report emissions and used to determine emissions and compliance obligations according to this division.

(2) A person must retain the following records necessary for supporting demonstration of compliance, according to OAR 340-271-0450, in paper or electronic format for a period of at least seven years following the deadline for demonstration of compliance in OAR 340-271-0450:

(a) Copies of reports and forms submitted to DEQ related to demonstration of compliance, including but not limited to demonstration of compliance forms; and

(b) All other information and documentation used to support demonstration of compliance.

(3) A covered fuel supplier must make available to DEQ upon request all of the records it is required to retain according to this rule. DEQ will specify the date by which the covered fuel supplier must fulfill a records request from DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Trading of Compliance Instruments

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Trading of Compliance Instruments rule for division 271.

### RULE TEXT:

(1) A covered fuel supplier may trade one or more compliance instruments only according to this rule. A covered fuel supplier may transfer one or more compliance instruments to another covered fuel supplier up to the amount that it has available and has not used to demonstrate compliance. A covered fuel supplier may acquire one or more compliance instruments from another covered fuel supplier.

(2) A covered fuel supplier may not engage in a trade of a compliance instrument involving, related to, in service of, or associated with any of the following:

(a) Fraud, or an attempt to defraud or deceive using any device, scheme or artifice;

(b) Use of any unconscionable tactic in connection with the transfer, by any person;

(c) Any false report, record, or untrue statement of material fact or omission of a material fact related to the transfer or conditions that would relate to the price of the compliance instrument being sold. A fact is material if it is reasonably likely to influence a decision by another person or by DEQ;

(d) Any activity intended to lessen competition or tend to create a monopoly, or to injure, destroy or prevent competition in the market for compliance instruments;

(e) A conspiracy in restraint of trade or commerce; or

(f) An attempt to monopolize holding of compliance instruments, or to combine, collude, or conspire with any other person or persons to monopolize.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Compliance Instrument Trade Notifications and Process

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Compliance Instrument Trade Notifications and Process rule for division 271.

#### RULE TEXT:

(1) Covered fuel suppliers that trade one or more compliance instruments must notify DEQ of the trade. The designated representatives of both the covered fuel supplier transferring the compliance instrument and the covered fuel supplier acquiring the compliance instrument must sign and submit a compliance instrument trade form that meets the requirements of this section, using a form approved by DEQ.

(a) The covered fuel supplier transferring one or more compliance instruments must sign first; and

(b) The covered fuel supplier acquiring the compliance instrument(s) must sign the same form and submit it to DEQ no later than one week after the transferring covered fuel supplier signs the form.

(c) All of the following must be included on a compliance instrument trade form:

(A) The agreed upon date of the trade.

(B) The total number of compliance instruments traded, and separately the total number traded from each calendar year's cap.

(C) The total price per compliance instrument (in US dollars), excluding any fees. If a specific dollar value is not paid for the compliance instrument, an estimate must be provided.

(D) As applicable, other information about the trade that DEQ determines is necessary to support DEQ's monitoring of trades and that DEQ includes on the form;

(E) The following information about the covered fuel supplier transferring the compliance instrument(s):

(i) Name and full mailing address of the covered fuel supplier.

(ii) Designated representative's contact information including name, title or position, phone number, and email address.(iii) The following attestation, signed by the designated representative:

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief the information in this form is true, accurate, and complete. [Covered fuel supplier] is transferring these compliance instruments to [covered fuel supplier that is acquiring] for the price described in this form.

(F) The following information about the covered fuel supplier acquiring the compliance instrument(s):

(i) Name and full mailing address of the covered fuel supplier.

(i) Designated representative's contact information including name, title or position, phone number, and email address. (iii) The following attestation, signed by the designated representative:

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief the information in this form is true, accurate, and complete. [Covered fuel supplier] is acquiring compliance instruments from [covered fuel supplier that is transferring] for the price described in this form.

(2) When DEQ receives a compliance instrument trade form for one or more compliance instruments as described in section (1), DEQ will inform the applicant either that the submitted form is complete or that additional specific information is required to make the form complete. Upon receipt of a complete form signed by both covered fuel suppliers involved in a trade, DEQ will track traded compliance instruments. DEQ will notify the designated representative of the covered fuel supplier acquiring compliance instrument(s) in writing of availability of these compliance instruments. DEQ will notify the designated representative of the covered fuel supplier transferring compliance instrument(s) in writing that the covered fuel supplier no longer holds the compliance instruments. If DEQ determines that the form is incomplete, DEQ will not track the requested trade unless and until the applicant provides

# Environmental Intervenors/331 Ryan/55

the additional information requested by DEQ to make the form complete, and such instruments will not be available to the covered fuel supplier acquiring the instruments.

(3) A covered fuel supplier acquiring one or more compliance instrument(s) in a trade may not use the compliance instrument(s) in other trades or toward demonstration of compliance with any compliance obligation until the trade has been reported to DEQ and DEQ has tracked the traded compliance instrument(s). Trades may only be reported to DEQ after DEQ has made the compliance instrument trade form available. DEQ will notify covered fuel suppliers when the compliance instrument trade form is available.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Recordkeeping Requirements Related to Trading

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Recordkeeping Requirements Related to Trading rule for division 271.

### RULE TEXT:

(1) A person who transfers one or more compliance instruments in a trade according to OAR 340-271-0510 must retain the following records related to each trade, in paper or electronic format for a period of at least seven years following the submission date of a complete compliance instrument trade form:

- (a) A copy of each compliance instrument trade form submitted to DEQ;
- (b) A copy of any invoice or documentation of monetary payment received related to the trade;
- (c) A statement from a financial institution showing receipt of any payment for the compliance instrument;
- (d) Documentation of any service or other qualitative compensation received related to the trade; and
- (e) A copy of all other data, reports, or other information related to the trade.
- (2) A person who acquires one or more compliance instruments in a trade according to OAR 340-271-0510 must retain the following records related to each trade, in paper or electronic format for a period of at least seven years following the submission date of a complete compliance instrument trade form:
- (a) A copy of each compliance instrument trade form submitted to DEQ;
- (b) A copy of any invoice or documentation of monetary payment related to the trade;
- (c) A statement from a financial institution showing any payment for the compliance instrument;
- (d) Documentation of any service or other qualitative compensation provided related to the trade; and
- (e) A copy of all other data, reports, or other information related to the trade.
- (3) Covered fuel suppliers must make the records retained according to this rule available to DEQ upon request. DEQ will specify the date by which the covered fuel supplier must fulfill a records request from DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Covered Fuel Supplier Application for Community Climate Investment Credits

## NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Covered Fuel Supplier Application for Community Climate Investment Credits rule for division 271.

## RULE TEXT:

(1) A covered fuel supplier is eligible to receive one or more CCI credits if it contributes CCI funds according to this rule.
 (a) The covered fuel supplier may receive CCI credits only for contributions to a CCI entity that has been approved by DEQ according to OAR 340-271-0920(1) and has entered into a written agreement with DEQ to accept and administer CCI funds according to OAR 340-271-0920(2).

(b) A covered fuel supplier is not eligible to receive a CCI credit for any contribution made to a CCI entity prior to March 1, 2023.

(c) If more than one CCI entity is approved to accept funds according to subsection (a) the covered fuel supplier must contribute an equal amount of CCI funds to each CCI entity that may receive funds consistent with its agreement with DEQ according to OAR 340-271-0920(2). The contribution amount to each CCI entity may vary by up to one US dollar.
(2) A covered fuel supplier must apply to receive CCI credits by submitting an application to DEQ, on a form approved by DEQ that includes the information described in section (3). A covered fuel supplier may not submit an application to request CCI credits on behalf of another person.

(3) A covered fuel supplier that submits an application to DEQ to request CCI credits must submit a complete and accurate application. The application must include:

(a) Information about the covered fuel supplier, including:

(A) Name and full mailing address; and

- $(B) \ Designated \ representative's \ contact \ information \ including \ name, \ title \ or \ position, \ phone \ number, \ and \ email \ address;$
- (b) The name of each CCI entity that received CCI funds from the covered fuel supplier;
- (c) A copy of the receipt(s) described in OAR 340-271-0930(1)(a) received from each CCI entity;
- (d) The total CCI funds (in US dollars) contributed to each CCI entity, excluding any fees; and
- (e) The following attestation, signed by the designated representative of the covered fuel supplier:

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief the information in this application is true, accurate, and complete. [Covered fuel supplier] contributed the community climate investment funds noted in this application to each community climate investment entity listed for the purposes of supporting eligible projects as described in OAR 340-271-0900.

(4)(a) A covered fuel supplier seeking to receive CCI credits in order to use them to demonstrate compliance for a particular compliance period must submit its application to DEQ no later than November 14 of the year it will demonstrate compliance according to OAR 340-271-0450, or 11 days after DEQ's notice described in OAR 340-271-0450(1), whichever is later.

(b) DEQ's determination of the quantity of CCI credits to generate and distribute is based on the amount of the covered fuel supplier's contribution to CCI entities, as documented in its application and the CCI credit contribution amount described in Table 7 in OAR 340-271-9000 that was in effect on the date the contribution was made, adjusted for inflation according to OAR 340-271-0820(3).

### STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Generation and Distribution of Community Climate Investment Credits

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Generation and Distribution of Community Climate Investment Credits rule for division 271.

#### RULE TEXT:

(1) DEQ will review an application submitted according to OAR 340-271-0810 to ensure that it meets the requirements of that rule. DEQ will inform the applicant either that the submitted application is complete or that additional specific information is required to make the application complete. If DEQ determines that the application is incomplete or does not meet the requirements of OAR 340-271-0810, DEQ will not consider the application further until the applicant provides the additional information requested by DEQ.

(2) DEQ will approve an application for CCI credits submitted by a covered fuel supplier if DEQ determines that the application is accurate and complete according to the requirements of OAR 340-271-0810, and DEQ determines that the CCI funds have been provided to an approved CCI entity that is in good standing according to OAR 340-271-0910 through OAR 340-271-0990.

(3) Approval of an application for CCI credits.

(a) Upon approval of an application for CCI credits, DEQ will notify the covered fuel supplier in writing that DEQ has approved the application and will generate and distribute to the covered fuel supplier the quantity of CCI credits approved according to subsection (b).

(b) The amount of CCI credits that DEQ will generate and distribute to the covered fuel supplier is one CCI credit for every verified contribution of the CCI credit contribution amount that a covered fuel supplier provides to a CCI entity, rounded down to the nearest whole number. The CCI credit contribution amount is the applicable amount in Table 7 in OAR 340-271-9000 for the date the contribution was made, with the CCI credit contribution amount adjusted for inflation and rounded to the nearest dollar using the inflation rate since January 2021, as provided by the United States Bureau of Labor and Statistics West Region Consumer Price Index for All Urban Consumers for all Items. DEQ will post the current, inflation adjusted CCI credit contribution amount on its website effective March 1 of each year. The formula for the adjustment is as follows:

CCI Credit Contribution Amount = CCI Credit Contribution Amount in Table 7 in OAR 340-271-9000 \* (CPI-U West for January of the calendar year for the price in Table 7 in OAR 340-271-9000 that is currently in effect / CPI-U West for January 2021)

(4) A CCI credit is a regulatory instrument and does not constitute personal property, a security or any other form of property.

(5) DEQ will track distributed CCI credits.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Holding Community Climate Investment Credits

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Holding Community Climate Investment Credits rule for division 271.

## RULE TEXT:

(1) When DEQ distributes a CCI credit to a covered fuel supplier according to OAR 340-271-0820, the covered fuel supplier may continue to hold the CCI credit until any of the following apply:

(a) The covered fuel supplier uses the CCI credit toward its demonstration of compliance according to OAR 340-271-0450;

(b) Two demonstration of compliance deadlines described in OAR 340-271-0450(2) have passed since the date DEQ provided written notice of its approval of the CCI credit to the covered fuel suppler according to OAR 340-271-0820 and the covered fuel supplier has not used the CCI credit in its demonstration(s) of compliance. In such a case, DEQ will cancel the CCI credit. A cancelled CCI credit may not be used toward demonstration of compliance; or

(c) The covered fuel supplier has ceased being a covered fuel supplier according to OAR 340-271-0130. When a covered fuel supplier ceases to be a covered fuel supplier, DEQ will cancel the CCI credit at the time of such cessation. A cancelled CCI credit may not be used toward any demonstration of compliance.

(2) Only a covered fuel supplier that receives a CCI credit from DEQ may hold the CCI credit. The covered fuel supplier may not trade the CCI credit.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Recordkeeping Requirements Related to Community Climate Investment Funds

## NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Recordkeeping Requirements Related to Community Climate Investment Funds rule for division 271.

RULE TEXT:

(1) A covered fuel supplier that provides CCI funds to a CCI entity must retain the following records, in paper or electronic format, for a period of time that begins with the date it provides the CCI funds and lasts seven years after all resulting CCI credits are submitted to demonstrate compliance or are cancelled:

(a) A copy of any invoice or documentation of monetary payment related to CCI funds;

(b) A statement from a financial institution showing any payments related to CCI funds;

(c) A copy of any receipt received from a CCI entity; and

(d) All other information and documentation related to the CCI funds provided to a CCI entity.

(2) A covered fuel supplier must retain the following records, in paper or electronic format, for a period that begins the date it applies for a CCI credit and lasts seven years after the CCI credit is used to demonstrate compliance or is cancelled:

(a) A copy of each application submitted to DEQ to request CCI credits; and

(b) All other information and documentation related to CCI credit(s) received from DEQ.

(3) A covered fuel supplier must make available to DEQ upon request all of the records it is required to retain according to this rule. DEQ will specify the date by which the covered fuel supplier must fulfill a records request from DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040, 468A.050

RULE TITLE: Purposes of Community Climate Investments and Eligible Uses of CCI Funds

## NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Purposes of Community Climate Investments and Eligible Uses of CCI Funds rule for division 271.

RULE TEXT:

(1) The purposes of community climate investments are to:

(a) Provide covered entities with an optional means of meeting part of their compliance obligation for one or more compliance periods;

(b) Reduce anthropogenic greenhouse gas emissions in Oregon by an average of at least one MT CO2e per CCI credit distributed by DEQ;

(c) Reduce emissions of other air contaminants that are not greenhouse gases, particularly in or near environmental justice communities in Oregon;

(d) Promote public health, environmental, and economic benefits for environmental justice communities throughout Oregon to mitigate impacts from climate change, air contamination, energy costs, or any combination of these; and (e) Accelerate the transition of residential, commercial, industrial and transportation-related uses of fossil fuels in or near environmental justice communities in Oregon to zero or to other lower greenhouse gas emissions sources of energy in order to protect people, communities and businesses from increases in the prices of fossil fuels.

(2) A CCI entity may use CCI funds only for:

(a) Implementing eligible projects in Oregon, which are actions that reduce anthropogenic greenhouse gas emissions that would otherwise occur in Oregon. Eligible projects include, without limitation, actions that reduce emissions in Oregon resulting from:

(A) Transportation of people, freight, or both;

(B) An existing or new residential use or structure;

(C) An existing or new industrial process or structure; and

(D) An existing or new commercial use or structure.

(b) The costs of administering CCI funds and eligible projects, including costs of reporting and other requirements included in OAR 340-271-0930 and costs of capacity-building for implementation of eligible projects.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Application to DEQ for Approval as a Community Climate Investment Entity

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Application to DEQ for Approval as a Community Climate Investment Entity rule for division 271.

RULE TEXT:

(1) To be eligible for DEQ approval as a community climate investment entity, an entity must demonstrate that it:
(a) Is authorized to do business in Oregon, and that it is exempt from federal taxation according to Section 501(c)(3) of the U.S. Internal Revenue Code, 26 U.S.C. § 501(c)(3);

(b) Has the capacity to administer and spend CCI funds to carry out eligible projects as specified in OAR 340-271-0900(2);

(c) Has or will have staff capable of conducting work associated with being a CCI entity according to this division;

(d) Has or will have staff or subcontractors capable of implementing eligible projects throughout Oregon; and (e) Is not a covered entity or a related entity of a covered entity.

(2) An eligible entity described in section (1) may apply to be approved as a CCI entity to implement eligible projects directly or by agreement with one or more subcontractors, or both. Subcontractors are not CCI entities, and do not need to meet the eligibility requirements of section (1). However, a CCI entity may not use CCI funds to pay a subcontractor that is a covered entity or a related entity of a covered entity.

(3) An entity that seeks approval as a CCI entity must submit an application to DEQ, on a form approved by DEQ that includes the following:

(a) Information about the entity, including:

(A) Name, full mailing address, and website address;

(B) Contact person's information including name, title or position, phone number, and email address;

(C) Information to describe how the entity meets the eligibility criteria in section (1);

(D) A copy of the entity's current articles of incorporation and bylaws, and a description of the mission of the entity and how being a CCI entity supports the mission;

(E) A description of the experience and expertise of key individuals, if known, who would be working to implement eligible projects with CCI funds or assigned work associated with the requirements of a CCI entity described in OAR 340-271-0930;

(F) A description of experience implementing or supporting implementation of eligible projects or project types, particularly in environmental justice communities in Oregon. This may include the experience of the key individuals described in paragraph (E) whether or not that prior experience occurred while working with the entity;

(G) Information regarding any violation by the entity related to federal or state labor laws within the preceding five years;

(H) The entity's IRS Form 990 for each of the three most recent years, if available; and

(I) Proof that the IRS has certified the entity as qualifying as an exempt organization according to Section 501(c)(3) of the U.S. Internal Revenue Code, 26 U.S.C. § 501(c)(3);

(b) Information about each known or planned subcontractors, as available, including:

(A) Name, full mailing address, and website address;

(B) Contact person's contact information including name, title or position, phone number, and email address;

(C) Confirmation that the subcontractor is not a covered entity or any of its related entities;

(D) If applicable, a description of the mission of the subcontractor and how being a subcontractor of a CCI entity supports the mission;

(E) A description of the experience and expertise of key individuals who would be working to implement eligible projects with CCI funds;

(F) A description of the subcontractor's prior experience implementing or supporting implementation of eligible

# Environmental Intervenors/331 Ryan/63

projects and a description of prior experience serving communities in Oregon; and

(G) Information regarding any violation by the proposed subcontractor related to federal or state labor laws within the preceding five years;

(c) Information about how any subcontractor(s) may be selected during project implementation if there are none listed in the application or if the entity expects to select one or more additional subcontractors during project implementation;

(d) If known, a general description of either or both of the following:

(A) Anticipated eligible project(s) or project type(s) that support the purposes of CCIs described in OAR 340-271-0900(1) and that are eligible projects as defined in OAR 340-271-0900(2) that the entity plans to implement if approved as a CCI entity; and

(B) The communities in Oregon that are anticipated to benefit if the entity is approved as a CCI entity;

(e) Description of the administrative processes and financial controls the entity will use to ensure all CCI funds are held separately from the entity's other funds. This must detail how the entity will manage and invest funds in a manner consistent with ORS 128.318(2), (3), and (5)(a) through (f);

(f) The anticipated annual total amount of CCI funds the entity would be able to receive and spend, including a description of why that annual amount is anticipated; and

(g) The following attestation, signed by the entity's contact person:

I certify under penalty of perjury under the laws of the State of Oregon that to the best of my knowledge and belief the information in this application is true, accurate, and complete. [Entity] seeks to become a community climate investment entity and, if approved, will comply with the applicable requirements in Oregon Administrative Rules chapter 340, division 271.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: DEQ Review and Approval of Community Climate Investment Entities and Agreements for Approved CCI Entities

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New DEQ Review and Approval of Community Climate Investment Entities and Agreements for Approved CCI Entities rule for division 271.

RULE TEXT:

(1) DEQ will review and may approve applications from entities proposing to be approved as CCI entities according to subsections (a) through (d).

(a) DEQ will review an application submitted according to OAR 340-271-0910 to ensure that it meets the requirements of that rule. DEQ will inform the entity either that the submitted application is complete or that additional specific information is required to make the application complete. If the application is incomplete, DEQ will not consider the application further until the entity provides the additional information requested by DEQ.

(b) When evaluating complete applications submitted according to OAR 340-271-0910, DEQ will consult with the equity advisory committee described in OAR 340-271-0950 and may consult with any other relevant experts selected by DEQ.

(c) DEQ will consider the following when evaluating a complete application:

(A) The content of the application;

(B) Whether the entity meets the eligibility criteria in OAR 340-271-0910(1);

(C) Whether each proposed subcontractor, if applicable, complies with the eligibility criteria in OAR 340-271-0910(1)(e);

(D) The overall ability of the entity and, if applicable, its subcontractor(s) to use CCI funds to complete eligible projects that advance the purposes set forth in OAR 340-271-0900(1) and that collectively reduce anthropogenic greenhouse gas emissions in Oregon by an average of at least one MT CO2e per CCI credit distributed by DEQ based on CCI contributions to the entity;

(E) The overall ability of the entity and/or its subcontractor(s) to use CCI funds as described in paragraph (D) relative to the overall ability of other applicants and approved CCI entities; and

(F) Whether the applicant or any proposed subcontractors have violated any federal or state labor laws in the preceding five years.

(d) DEQ will notify the applicant in writing whether provisional approval as a CCI entity is granted or denied.

(2) If provisional approval as a CCI entity is granted, DEQ will then work with the CCI entity to complete a written agreement. The written agreement must be approved before an entity receives final approval as a CCI entity and is authorized to receive CCI funds. The written agreement will include, but is not limited to:

(a) Agreement to use CCI funds only for the uses specified in OAR 340-271-0900(2);

(b) The initial term of the agreement and approval, which may not exceed ten years;

(c) Requirements for monitoring and reporting of project outcomes sufficient to document emissions reductions;

(d) Provisions for, and limitations on, the payment of administrative expenses;

(e) Provisions for extensions, amendments, or renewal of the agreement;

(f) Other conditions that DEQ determines are necessary to include in the agreement in order to meet the requirements of this division, such as a limit on the amount of CCI funds that a CCI entity may accept.

(3) If DEQ finds that any of the events in subsections (a) through (c) occur, DEQ may suspend or revoke approval of a CCI entity completely or in part.

(a) The CCI entity fraudulently obtained DEQ approval;

(b) The CCI entity is in violation of any applicable provisions of this division or any written agreement between the CCI entity and DEQ; or

(c) DEQ determines that the CCI entity is not in compliance with one or more of the eligibility criteria for approval in

OAR 340-271-0910(1).

(4) DEQ will maintain a current list of approved CCI entities on DEQ's website.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Requirements for Community Climate Investment Entities

#### NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Requirements for Community Climate Investment Entities rule for division 271.

## RULE TEXT:

(1) Acceptance of CCI funds.

(a) Once approved by DEQ, unless otherwise specified in the agreement between a CCI entity and DEQ, a CCI entity must accept CCI funds from any covered fuel supplier that seeks to contribute CCI funds. The CCI entity must provide a receipt to the covered fuel supplier upon receipt of CCI funds from the covered fuel supplier. The receipt must include:
 (A) The name of the covered fuel supplier;

- (B) The name of the CCI entity;
- (C) The US dollar amount of the CCI funds accepted;
- (D) The date the CCI entity accepted the CCI funds; and
- (E) The following attestation:

I verify that [CCI Entity] received the contribution from [Covered fuel supplier] as described on this receipt and I affirm that I am a representative of [CCI entity] authorized to sign this receipt.

(b) Unless otherwise specified in the agreement between the CCI entity and DEQ, a CCI entity must accept CCI funds transferred to it from another CCI entity according to section (8).

(2) Holding CCI funds.

(a) A CCI entity must hold all CCI funds in one or more accounts separate from any other funds. Additionally, prior to being spent in compliance with the provisions of this division and its agreement with DEQ, funds must be managed and invested in a manner consistent with ORS 128.318(2), (3), and (5)(a) through (f). A CCI entity may not encumber CCI funds or pledge CCI funds as a security for other purposes than completing one or more projects under a DEQ-approved work plan.

(b) A CCI entity must complete an independent financial audit of CCI funds for each year in which it holds CCI funds.
(3) Use of CCI funds. A CCI entity may only spend CCI funds for the uses specified in OAR 340-271-0900(2). The expenditures of CCI funds must conform to the CCI's work plan approved by DEQ under section (4) of this rule.
(4) Work Plan.

(a) A CCI entity must submit its proposed work plan to DEQ for review and approval. The period of the work plan will normally be a calendar year, unless otherwise specified in the agreement between DEQ and the CCI entity. A CCI entity must obtain DEQ approval of the work plan prior to committing or expending CCI funds for the period of the work plan. The first work plan must be submitted within 60 days of the date on which the CCI entity entered into a written agreement with DEQ described in OAR 340-271-0920(2). Each subsequent work plan must be submitted no later than 30 days prior to the end of the current work plan period.

(b) The work plan must include:

(A) A description of the project(s) or project type(s) the CCI entity expects to support with CCI funds during the period of the work plan, and how the project(s) or project type(s) support each of the purposes of CCIs described in OAR 340-271-0900(1)(b) through (e);

(B) A description of how the project(s) or project type(s) will benefit communities in Oregon, including description of the potential locations of communities or regions of Oregon in which projects may be implemented or a description of how locations may be selected;

(C) A description of how each project or project type would benefit environmental justice communities in Oregon;(D) A description of the methodology that the CCI entity is using to estimate the reductions in anthropogenic greenhouse gas emissions that will result from the project(s) or project type(s) in the work plan, along with an estimate

# Environmental Intervenors/331 Ryan/67

of the anticipated reductions during the period of the work plan. The methodology must be sufficient to allow DEQ to perform the necessary calculations in a program review according to OAR 340-271-8100;

(E) A description of the methodology that the CCI entity is using to estimate the reductions in other air contaminant emissions that will result from the project(s) or project type(s) in the work plan, along with an estimate of the anticipated reductions during the period of the work plan;

(F) The name and contact person's contact information of subcontractors that will be involved in any project activities during the period of the work plan; and

(G) The estimated total budget for the period of the work plan. CCI funds must be listed separately from any other funds, as applicable. This must separately include the following:

(i) All costs related to project implementation, listed separately for groups of project(s) or project type(s), including but not limited to personnel costs and materials costs; and

(ii) Administrative costs related to the project implementation and meeting the requirements of this rule.

(c) A CCI entity may request DEQ approval of modifications to a DEQ-approved work plan by submitting modifications to the information described in subsection (b). The CCI entity must obtain DEQ approval of any modification to a work plan prior to beginning work according to a modified work plan.

(d) DEQ will review each submitted work plan to ensure that it meets the requirements of this section. DEQ will inform the CCI entity either that the submitted work plan is complete or that additional specific information is required to make the work plan complete. If the work plan is incomplete, DEQ will not consider the work plan further until the CCI entity provides the additional information requested by DEQ. DEQ will consider the following in its review:

(A) The overall ability of the CCI entity to conduct work according to the work plan;

(B) Whether following the work plan is reasonably likely to reduce anthropogenic greenhouse gas emissions in Oregon by an average of at least one MT CO2e per CCI credit distributed by DEQ based on CCI fund contributions to the CCI entity;

(C) Whether the work plan is consistent with the purposes of CCIs described in OAR 340-271-0900; and

(D) Input from the equity advisory committee described in OAR 340-271-0950 and from any other relevant experts selected by DEQ.

(5) Annual report. A CCI entity must submit to DEQ an annual report by March 31 each year that describes its CCIrelated activities and finances for the preceding calendar year, including:

(a) The following information related to CCI funds received, held, or spent during the year:

(A) Each financial statement for the account(s) where CCI funds were held and the results of the CCI entity's most recent independent financial audit;

(B) The date, amount of CCI funds accepted, and as applicable, the name of the covered fuel supplier for each separate contribution received;

(C) Total CCI fund interest accrual;

(D) Total CCI funds spent, including separate totals of:

(i) CCI funds spent on each project, including but not limited to personnel costs and materials costs; and

(ii) Administrative costs related to the project, including project development, and implementation and meeting the requirements of this rule;

(E) Total CCI funds the CCI entity holds that remain unspent as of the end of the year; and

(F) Total non-CCI funds spent on implementation of each project or project type, as applicable;

(b) The following information related to implementation progress of project(s) or project type(s) during the year:

(A) Documentation of work completed or progress made on each project or project type, including the number of projects completed of each project type, as applicable;

(B) A summary of project outcomes. This must include estimated annual greenhouse gas emissions reductions in metric tons of CO2e and non-greenhouse gas air contaminant emissions reductions in metric tons of the applicable air contaminant that are anticipated to be achieved from any project(s) completed during the year. Emissions reductions must be estimated using the methodology included in the applicable work plan. Emissions reductions may be reported

# Environmental Intervenors/331 Ryan/68

by individual project or may be grouped by project type, if the CCI entity can provide sufficient information to demonstrate that the emissions reductions of multiple projects of the same type are comparable; and (C) A description of work that occurred compared to the most recently approved work plan or modified work plan. If projects were not implemented as planned, the CCI entity must describe the reason for delay and must describe any steps that may be taken to work to remedy the delay or prevent similar delays in subsequent years; and (c) A copy of the CCI entity's most recent IRS form 990.

(6) Maintaining CCI entity eligibility.

(a) A CCI entity must notify DEQ in writing as soon as possible, and not later than 30 days after it no longer meets any of the eligibility criteria for approval in OAR 340-271-0910(1), or if it is in violation of any of the requirements of this rule.
(b) A CCI entity must notify DEQ in writing as soon as possible and not later than 30 days after any changes are made to the administrative processes or financial controls that keep CCI funds separate from other funds;

(c) A CCI entity must notify DEQ in writing as soon as possible and not later than 30 days after any changes related to key individuals or their assigned work associated with being a CCI entity.

(d) A CCI entity must notify DEQ in writing as soon as possible and not later than 30 days after any finding of a violation related to federal or state labor laws by the CCI entity or by an approved subcontractor;

(e) Upon written request by DEQ, a CCI entity must provide to DEQ in a reasonably timely manner any and all information that DEQ reasonably requires for evaluating the CCI entity's continued compliance with the requirements of this division, including the criteria for approval as a CCI entity and eligible projects.

(7) Voluntary withdrawal from DEQ approval. An approved CCI entity may request to withdraw voluntarily its approval by providing a written notice to DEQ requesting such withdrawal.

(8) Rollover of CCI funds. If DEQ approval is suspended, revoked, or voluntarily withdrawn, DEQ may require the entity to transfer any unspent CCI funds to another CCI entity and provide proof to DEQ that the transfer has been made.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Equity Advisory Committee and Environmental Justice Community Engagement

### NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Equity Advisory Committee and Environmental Justice Community Engagement rule for division 271.

RULE TEXT:

(1) DEQ will appoint and convene an equity advisory committee to assist DEQ with:

(a) Review of:

(A) Applications to become a CCI entity;

(B) Requests for DEQ approval of work plans; and

(C) Other submittals by CCI entities that require DEQ review; and

(b) Outreach to environmental justice communities.

(2) Advisory committee member selection.

(a) DEQ may solicit applications from residents of the state of Oregon to be appointed to serve as members of the equity advisory committee and may select the committee from those applications.

(b) DEQ will prioritize convening an advisory committee that represents multiple areas of expertise, interest, or lived experience in the following areas:

(A) Environmental justice;

(B) Impacts of climate change on communities in Oregon;

(C) Impacts of air contamination on communities in Oregon; and

(D) Greenhouse gas emissions reductions and climate change.

(c) DEQ will prioritize convening an advisory committee that represents multiple regions across Oregon.

(d) DEQ may appoint each committee member to a term of up to three years.

(3) In addition to outreach conducted by CCI third party entities to environmental justice communities throughout Oregon, DEQ will conduct outreach to these communities to seek input on projects that may be of interest to those communities. The equity advisory committee will consider this input when assisting DEQ as described in section (1). DEQ will consider this input when making approval decisions regarding CCI entities, projects and project types, and work plans.

(4) DEQ will offer guidance and conduct outreach to support the equity advisory committee and environmental justice communities in Oregon in understanding the provisions related to CCIs.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Recordkeeping Requirements for Community Climate Investment Entities

## NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Recordkeeping Requirements for Community Climate Investment Entities rule for division 271.

## RULE TEXT:

(1) A CCI entity must retain the following records, in paper or electronic format, for the duration of its approval as a CCI entity and for a period of at least seven years following the end of its approval:

(a) A copy of each application submitted to DEQ for approval as a CCI entity;

(b) A copy of any invoice or documentation of monetary payment related to CCI funds;

(c) A statement from a financial institution showing any payments related to CCI funds;

(d) A copy of any receipt provided to a covered fuel supplier that makes a CCI payment to the CCI entity;

(e) A copy of any work plan submitted to DEQ by the CCI entity;

(f) A copy of any report or written request for approval submitted to DEQ by the CCI entity;

(g) All other information and documentation related to CCI funds;

(h) All records related to any implemented projects; and

(i) All records and information supporting estimates of greenhouse gas emissions reductions and other air contaminant emissions reductions achieved from implemented projects or project types.

(2) CCI entities must make records required to be retained in this rule available to DEQ upon request. DEQ will specify the date by which the CCI entity must fulfill a records request from DEQ.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Program Review

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Program Review rule for division 271.

RULE TEXT:

(1) DEQ will report to the EQC on community climate investments. DEQ will submit the first report to the EQC by August 30, 2024 and every two years thereafter. DEQ will share each report with current members of the equity advisory committee after submission to the EQC. Each community climate investment report will include:

(a) A review of community climate investments, including:

(A) CCI credits distributed to covered fuel suppliers;

(B) CCI credits used by covered fuel suppliers to demonstrate compliance;

(C) Estimates of annual greenhouse gas emissions reductions that are anticipated to be achieved by completed projects that CCI entities have reported to DEQ by March 31 of the year DEQ is reporting to the EQC;

(D) Estimates of annual non-greenhouse gas air contaminant emissions reductions that are anticipated to be achieved by completed projects that CCI entities have reported to DEQ by March 31 of the year DEQ is reporting to the EQC;(E) Calculation of the average anthropogenic greenhouse gas emissions reductions achieved per CCI credit distributed

based on (A) and (C) and whether reductions of approximately one MT CO2e or more of anthropogenic greenhouse gas emissions for the average CCI credit distributed by DEQ was achieved; and

(F) Description of community benefits achieved; and

(b) DEQ's recommendations regarding any necessary or desirable changes to the CPP provisions relating to CCIs, including, without limitation, recommendations on changes to the CCI credit contribution amounts described in Table 7 in OAR 340-271-9000 necessary to assure that the use of CCI funds is reducing anthropogenic greenhouse gas emissions in Oregon by an average of at least one MT CO2e per CCI credit distributed by DEQ, as well as recommendations on how to best achieve the purposes of CCIs described in OAR 340-271-0900, if applicable.
(2) DEQ will report to the EQC on implementation of the Climate Protection Program. DEQ will submit the first report to the EQC five years after the date of adoption of this division and at least once every five years thereafter. Each

program review report will include:

(a) A review of the Climate Protection Program, including:

(A) Summary of covered fuel suppliers' demonstrations of compliance for compliance periods that have occurred since program start, including:

(i) Caps for each year and compliance period;

(ii) Compliance obligations for each year and compliance period;

(iii) Compliance instruments submitted for each compliance period; and

(iv) CCI credits submitted for each compliance period;

(B) Summary of the distribution of compliance instruments, including the size of the compliance instrument reserve at the start and end of each program year that has occurred and compared to Table 3 in OAR 340-271-9000;

(C) Summary of activity relating to trading of compliance instruments for each program year that has occurred;

(D) Summary of covered stationary source requirement activities that have occurred since program start or since the most recently submitted report to the EQC, whichever is later, including:

(i) The number of existing stationary sources that DEQ has notified in writing that must complete a BAER assessment;(ii) The number of BAER assessments received or anticipated to be received by DEQ;

(iii) A brief summary of any BAER order issued and the required actions that must be taken by the owner or operator of a covered stationary source that has been issued a BAER order;

(iv) A brief summary of the status of any covered stationary source activities regarding implementation of requirements in a BAER order; and

(v) Review of any changes in annual covered emissions from current covered stationary sources to assess whether

covered emissions are being reduced;

(E) Whether emission reductions from covered stationary sources align with the priorities described in section (3). This will be assessed in program reviews beginning after 2029.

(F) A current list of covered entities by name and whether each is a covered fuel supplier or covered stationary source; and

(G) Description of any enforcement actions taken that involved civil penalties, if applicable; and

(b) DEQ's recommendations regarding any potential changes to the CPP including, for example and without limitation, recommendations regarding potential changes to best achieve the goals described in section (3) for covered stationary sources.

(3) CPP goals for covered stationary sources described in OAR 340-271-0110(5) are to:

(a) Reduce total covered emissions from covered stationary sources; and

(b) Reduce total covered emissions from covered stationary sources that are the result of combustion of solid or gaseous fuels by 50 percent by 2035 from the average of 2017 through 2019 emissions.

(4) If the average annual statewide retail cost of gasoline, diesel or natural gas in Oregon increases year-over-year by an amount that is more than 20 percent higher than the average change in cost for the same fuel over the same period in Washington, Idaho, and Nevada, DEQ will investigate the cause(s) of the increase and report to the EQC regarding whether changes to the rules in this division should be made that would ameliorate a relative increase in costs in Oregon. If necessary, DEQ will consider recommending rule changes, such as changes to caps and distribution of additional compliance instruments, changes to the compliance instrument reserve, or changes to the allowable usage of CCI credits.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Deferrals

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Deferrals rule for division 271.

RULE TEXT:

DEQ may extend reporting or demonstration of compliance deadlines as DEQ deems necessary or appropriate and will issue written notice of any extensions.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Severability

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Severability rule for division 271.

RULE TEXT:

Each requirement of this division is severable, and if any requirement of this division is held invalid, the remainder of the requirements of this division will continue in full force and effect.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

RULE TITLE: Tables

NOTICE FILED DATE: 08/05/2021

RULE SUMMARY: New Tables rule for division 271.

RULE TEXT:

(1) Table 1. Thresholds for applicability described in OAR 340-271-0110(3).

(2) Table 2. Oregon Climate Protection Program caps.

(3) Table 3. Compliance instrument reserve size.

(4) Table 4. Compliance instrument distribution to covered fuel suppliers that are local distribution companies.

(5) Table 5. Compliance instrument distribution evaluation periods.

(6) Table 6. Covered fuel supplier allowable usage of community climate investment credits to demonstrate compliance as described in OAR 340-271-0450(3).

(7) Table 7. CCI credit contribution amount.

STATUTORY/OTHER AUTHORITY: ORS 468.020, 468A.025, 468A.040

OAR 340-271-9000 Table 1 Thresholds for applicability described in OAR 340-271-0110(3)			
Applicability determination calendar year(s)	Threshold for applicability to compare to annual covered emissions	Calendar year a person becomes a covered fuel supplier	
Any year from 2018 through 2022	200,000 MT CO2e	2022	
2023	200,000 MT CO2e	2023	
2024	200,000 MT CO2e	2024	
Any year from 2021 through 2025	100,000 MT CO2e	2025	
2026	100,000 MT CO2e	2026	
2027	100,000 MT CO2e	2027	
Any year from 2024 through 2028	50,000 MT CO2e	2028	
2029	50,000 MT CO2e	2029	
2030	50,000 MT CO2e	2030	
Any year from 2027 through 2031	25,000 MT CO2e	2031	
2032	25,000 MT CO2e	2032	
Each subsequent year	25,000 MT CO2e	Each subsequent year	



# OAR 340-271-9000 Table 2 Oregon Climate Protection Program caps

Quality	
Calendar year	Сар
2022	28,081,335
2023	27,001,283
2024	25,921,232
2025	25,763,209
2026	24,637,057
2027	23,510,904
2028	23,013,190
2029	21,842,149
2030	20,671,108
2031	19,910,424
2032	18,688,088
2033	17,465,752
2034	16,243,416
2035	15,021,080
2036	14,219,956
2037	13,418,831
2038	12,617,707
2039	11,816,583
2040	11,015,459
2041	10,214,334
2042	9,413,210
2043	8,612,086
2044	7,810,962
2045	7,009,837
2046	6,208,713

2047	5,407,589
2048	4,606,465
2049	3,805,340
2050 and each calendar year thereafter	3,004,216

OAR 340-271-9000 Table 3 Compliance instrument reserve size			
Calendar year(s) of the cap	Reserve size		
2022	400,000 compliance instruments		
2023 through 2030	800,000 compliance instruments		
2031 through 2040	500,000 compliance instruments		
2041 and each calendar year thereafter	250,000 compliance instruments		



# OAR 340-271-9000

## Table 4

Compliance instrument distribution to covered fuel suppliers that are local distribution companies

Calendar year	Compliance instruments to distribute to Avista Utilities	Compliance instruments to distribute to Cascade Natural Gas Corporation	Compliance instruments to distribute to Northwest Natural Gas Company
2022	703,373	743,707	5,759,972
2023	676,320	715,103	5,538,434
2024	649,267	686,499	5,316,897
2025	622,214	657,895	5,095,359
2026	595,161	629,291	4,873,822
2027	568,109	600,687	4,652,285
2028	541,056	572,083	4,430,747
2029	514,003	543,478	4,209,210
2030	486,950	514,874	3,987,673
2031	459,897	486,270	3,766,135
2032	432,845	457,666	3,544,598
2033	405,792	429,062	3,323,061
2034	378,739	400,458	3,101,523
2035	351,686	371,854	2,879,986
2036	332,930	352,021	2,726,387
2037	314,173	332,189	2,572,787
2038	295,416	312,357	2,419,188
2039	276,660	292,525	2,265,589
2040	257,903	272,693	2,111,990
2041	239,147	252,860	1,958,390
2042	220,390	233,028	1,804,791

2043	201,633	213,196	1,651,192
2044	182,877	193,364	1,497,593
2045	164,120	173,532	1,343,993
2046	145,364	153,699	1,190,394
2047	126,607	133,867	1,036,795
2048	107,850	114,035	883,196
2049	89,094	94,203	729,596
2050 and each calendar year thereafter	70,337	74,371	575,997

OAR 340-271-9000         Table 5         Compliance instrument distribution evaluation periods		
Calendar years of emissions for evaluation periodYear in which evaluation occurs to determine distribution of compliance instrumentsCalendar year the cap		Calendar year of the cap
2018 through 2020	2021	2022
2019 through 2021	2022	2023
2020 through 2022 2023 2024		
Each subsequent three year period   Each subsequent year   Each subsequent year		

OAR 340-271-9000         Table 6         Covered fuel supplier allowable usage of community climate investment credits to demonstrate compliance as described in OAR 340-271-0450(3)		
Compliance period	Allowable percentage of total compliance obligation(s) for which compliance may be demonstrated with CCI credits	
Compliance period 1 (2022 through 2024)	10%	
Compliance period 2 (2025 through 2027)	15%	
Compliance period 3 (2028 through 2030), and for each compliance period thereafter	20%	

OAR 340-271-9000 Table 7 CCI credit contribution amount		
Effective date	CCI credit contribution amount in 2021 dollars, to be adjusted according to OAR 340-271-0820(3)	
March 1, 2023	\$107	
March 1, 2024	\$108	
March 1, 2025	\$109	
March 1, 2026	\$110	
March 1, 2027	\$111	
March 1, 2028	\$112	
March 1, 2029	\$113	
March 1, 2030	\$114	
March 1, 2031	\$115	
March 1, 2032	\$116	
March 1, 2033	\$117	
March 1, 2034	\$118	
March 1, 2035	\$119	
March 1, 2036	\$120	
March 1, 2037	\$121	
March 1, 2038	\$122	
March 1, 2039	\$123	
March 1, 2040	\$124	
March 1, 2041	\$125	
March 1, 2042	\$126	
March 1, 2043	\$127	
March 1, 2044	\$128	
March 1, 2045	\$129	
March 1, 2046	\$130	

9

March 1, 2047	\$131
March 1, 2048	\$132
March 1, 2049	\$133
March 1, 2050	\$134

# **CERTIFICATE OF FILING AND SERVICE**

I hereby certify that I electronically filed the original of this PETITION FOR

# JUDICIAL REVIEW OF ADMINISTRATIVE RULE with the Oregon State

Court Administrator, Appellate Records Section, by using the appellate electronic

filing system on March 18, 2022.

I further certify that I served a true copy of this **PETITION FOR JUDICIAL** 

**REVIEW OF ADMINISTRATIVE RULE** upon all participants in the case as

follows:

Ellen F. Rosenblum Attorney General of the State of Oregon Benjamin Gutman Office of the Solicitor General Oregon Department of Justice Appellate Division 400 Justice Building 1162 Court Street, NE Salem, OR 97301-4096 Email: ellen.f.rosenblum@doj.state.or.us benjamin.gutman@doj.state.or.us

Oregon Environmental Quality Commission Department of Environmental Quality 4026 Fairview Industrial Drive SE Salem, OR 97302

by United States Postal Service, certified or registered mail, return receipt requested, and email.

<u>s/ Clifford S. Davidson</u> Clifford S. Davidson, OSB No. 125378

4871-5647-5670

## **BEFORE THE PUBLIC UTILITY COMMISSION**

## **OF OREGON**

UG 461

In the Matter of	)
AVISTA CORPORATION, dba AVISTA UTILITIES,	) ) )
Request for a General Rate Revision.	)

# **OPENING TESTIMONY**

#### **OF BENEDIKT SPRINGER**

# ON BEHALF OF SIERRA CLUB AND CLIMATE SOLUTIONS

(Non-Confidential)

July 7, 2023



### TABLE OF CONTENTS

ENERGY JUSTICE	
INVESTMENT RISK	
AFFORDABILITY	
ENERGY EFFICIENCY	

#### Q. Please state your name, occupation, and business address.

 A. My name is Benedikt Springer. I am a utility policy analyst with the Community Action Partnership of Oregon (CAPO). My business address is 2475 Center Street NE, Salem, OR 97301.

**Q.** Please describe your educational background and work experience.

 A. I hold a bachelor's degree in economics and political science from the University of Tübingen (Germany). I earned a PhD in political science from the University of Oregon in 2018.

As a utility policy analyst at CAPO, my job is to advocate for low-income interests in utility regulation and improve the energy assistance and weatherization programs our network administers. Our goal is that everyone can meet their basic needs, like accessing electricity, without financial stress.

Previously, I worked as a policy analyst at the Morrison Institute for Public Policy at Arizona State University. In that position, I co-led major policy research projects on housing affordability, housing for people with serious mental illness, and homelessness. I have also done policy analysis for the Bureau of Labor and Industries (BOLI), advising the labor commissioner and its (wage and hour, antidiscrimination) law enforcement divisions. As a PhD student and after, I have taught political science classes at the University of Oregon, Portland Community College, and Mount Hood Community College.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

### Q. What is the Community Action Partnership of Oregon (CAPO) and why are you offering testimony in this rate case?

A. CAPO is a 501(c)(3) non-profit formed by the 17 Oregon community action agencies and a special purpose organization, the Oregon Human Development Corporation. Our organizations plan, implement, and deliver anti-poverty programs across all of Oregon's 36 counties, including homeless shelters, food banks, and Head Start. Our network is also responsible for implementing state- and federally-funded weatherization programs (e.g., ECHO, WAP) as well as energy assistance programs (e.g., LIHEAP, OEAP). We also implement assistance programs for Avista. Five member organizations have clients that are served by Avista: Community Connection of NE Oregon in Union County, Klamath and Lake County Community Action Services in Klamath County, the Oregon Human Development Corporation in Klamath County, ACCESS in Jackson County, and United Community Action Network in Josephine and Douglas County. As an association, our mission is to magnify the anti-poverty efforts of our network through advocacy in legislative and regulatory proceedings. Nation-wide, there are over 1,000 community action agencies. What unites them is combining direct service delivery with efforts to address the root causes of poverty.

23

I am offering testimony on behalf of CAPO in this rate case because natural gas rates that are affordable to everyone are critically important to addressing the causes of poverty. Affordable energy rates mean families don't have to choose between feeding their children and keeping the heat on in their homes in the winter. We serve tens of thousands of low-income households every year. Our advocacy is

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

based on this experience. Unfortunately, in the past, low-income customers have seen little representation in contested proceedings like this general rate revision. We are here to change this.

### Q. Please describe your experience appearing before the Oregon Public Utilities Commission.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A. Since I started working for CAPO, I have been involved with three major dockets at the OPUC. In collaboration with a coalition of Environmental Justice Advocates, I contributed to the rulemaking in AR 653. In the wake of the COVID pandemic and the passage of HB 2475, AR 653 was a docket to revise Oregon administrative rules contained under 860-021 with the intent of making them more protective for lowincome customers. Among other things, I provided research and testimony that led to a disconnection moratorium when temperatures fall below 32 degrees F and the abolition of customer deposits for those with low incomes.

I was also heavily involved in UM 2211 and adjacent activities surrounding the establishment of low-income bill discount programs at all investor-owned utilities in Oregon. My analysis and testimony were integral to showing that discounts not exceeding 25% are insufficient for those with very low incomes. As a result, NW Natural and Pacific Power agreed to adopt an additional discount tier of 40%.

Currently, I am also intervening in PGE's pending rate case on behalf of CAPO, (UE 416). My opening testimony there raises similar Energy Justice issues, arguing that the public interest demands stronger consideration of questions regarding distributive and procedural justice. In all three cases, CAPO received intervenor funding from the OPUC.

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

I interact regularly with Oregon's investor-owned utilities, including Avista, outside of OPUC proceedings. Since community action agencies administer energy assistance and weatherization programs for these utilities, I attend coordination meetings to represent our interests and advocate for program improvements.

#### Q. What is the purpose of your testimony?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A. The purpose of my testimony is to show that Avista's rate schedules, policies, and investments insufficiently consider Energy Justice factors—this is true for the past and for the newly proposed rates in this case. The proposed rate increase for the residential class will exacerbate affordability issues for low-income customers. I encourage the Commission to reject the proposed general rate revision if no additional accommodations for low-income customers are made, and Energy Justice factors are not considered more strongly. The Energy Justice factors, we would like to see considered more strongly by all parties, can be summarized as follows:

(1) Ensure that basic necessities like home energy utility service is made available to all Oregonians without causing energy burden.

(2) Decisions about generation, distribution, and cost-attribution should be based on a comprehensive analysis of cost and benefits to <u>differentially situated</u> groups especially those in marginalized communities—recognition justice—and take into account communities' varying abilities to contribute based on their available resources and histories of oppression—distributional justice.

(3) Give more weight in utility governance decisions to voices and perspectives that have been historically powerless—procedural justice.

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

1		(4) Incorporate a broader set of values, theories, and concepts in rate case
2		discussions and decisions by reforming traditional regulatory processes. <sup>1</sup>
3	Q.	How is your testimony organized?
4	A.	The first section explains Energy Justice and its implications for just and reasonable
5		rates. The second section looks at some of Avista's investment decisions and system
6		subsidies, concluding that there are excessive risks for low-income customers. The
7		third section dives into why Avista's rates are insufficiently affordable, and how this
8		can be remedied. The last section reviews Avista's low-income energy efficiency
9		programs, arguing that they fall short of their goals.
10	Q.	What are your concrete recommendations Commissioners should consider in
11		this case?
12	A.	To achieve energy justice, and uphold the Commission's duty to consider energy
12 13	A.	To achieve energy justice, and uphold the Commission's duty to consider energy burden in setting rates for energy utilities, I recommend that the Commission take the
	A.	
13	A.	burden in setting rates for energy utilities, I recommend that the Commission take the
13 14	A.	burden in setting rates for energy utilities, I recommend that the Commission take the following actions:
13 14 15	A.	<ul> <li>burden in setting rates for energy utilities, I recommend that the Commission take the following actions:</li> <li>Insulate low-income customers from regulatory risks that disproportionally affect</li> </ul>
13 14 15 16	A.	<ul> <li>burden in setting rates for energy utilities, I recommend that the Commission take the following actions:</li> <li>Insulate low-income customers from regulatory risks that disproportionally affect them and do not require them to contribute to risky investments. Specifically,</li> </ul>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>	A.	<ul> <li>burden in setting rates for energy utilities, I recommend that the Commission take the following actions:</li> <li>Insulate low-income customers from regulatory risks that disproportionally affect them and do not require them to contribute to risky investments. Specifically, require Avista to review bill discount tiers and amounts to determine whether</li> </ul>

<sup>&</sup>lt;sup>1</sup> For discussions of Energy Justice see: Kirsten Jenkins et at., 2016, "Energy justice: A Conceptual Review," Energy Research & Social Science, Volume 11, <u>https://doi.org/10.1016/j.erss.2015.10.004</u>; Salma Elmallah, Tony G. Reames, and Anna Spurlock, 2022, "Frontlining Energy Justice: Visioning Principles for Energy Transitions from Community-Based Organizations in the United States," Energy Research & Social Science, Volume 94, <u>https://doi.org/10.1016/j.erss.2022.102855</u>.

1		allowances (it might be more practical to exempt all residential customers).
2		Exempt low-income customers from paying for high-risk speculative
3		technologies like RNG, hydrogen, synthetic methane, and biogas. Consider
4		allowing cost-effective electrification through the low-income energy efficiency
5		program as a way to protect low-income customers from likely price shocks.
6	•	Require Avista to reflect more stakeholder perspectives in its proposal and
7		testimony in future rate case proceedings. Any substantive ask in a rate case
8		should first receive input from the Low-Income Advisory Council ("LAIC"),
9		including those that can speak to Energy Justice. The LAIC should be consulted
10		prior to the filing of a utility rate case, to ensure that any proposed rate increase
11		does not exacerbate existing energy burdens for low-income customers.
12	•	Require the company to estimate rate increase effects on metrics like the number
13		of energy-burdened customers and the size of the energy affordability gap.
14		Require the publication of disconnection rates by socio-demographic factors like
15		income and race.
16	•	Use data analysis and modeling to automatically enroll low-income customers
17		into the assistance programs they are eligible for. Proactive enrollment is the only
18		way to keep natural gas affordable to low-income customers and prevent
19		disconnections. Such a proactive approach is specifically important for likely
20		low-income customers with a disconnection notice. It simply does not make
21		sense that Avista currently disconnects customers whom the company knows to
22		likely qualify for assistance.
	1	

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

1	• Adjust bill discount amounts must take into account above-average bills. Energy
2	must be affordable to all low-income customers, even if they live in inefficient
3	houses or have high energy needs.
4	• Increase the budget for the low-income weatherization program to \$3.5 million
5	and require Avista to spend 100% of its allocated low-income weatherization
6	funds, and increase the funding for low-income weatherization programs.
7	Revamp the program to:
8	• Target enrollment of high-energy burden, high energy-efficiency
9	potential customers.
10	• Include project costs that consider non-efficiency benefits, like increased
11	thermal comfort, dwelling durability, and housing stabilization, by
12	increasing the allocated budget for health, and safety repairs.
13	• Increase delivery partners' use of administrative funds and allow them to
14	build delivery capacity.
15	ENERGY JUSTICE
15	ENERGISUSTICE
16	Q. Please explain why issues like affordability, low-income weatherization, and
17	justice for marginalized populations are relevant considerations to Avista
18	Utilities' request for an increase to gas utility service rates.
19	A. We believe that issues like affordability, low-income weatherization, and justice for
20	marginalized populations are fundamental to making the type of determinations
21	presented to the Public Utility Commissioners in a rate case. In considering whether

rates are just, fair, and reasonable, the Commission should look to whether the proposed rate increase conforms to the principles of Energy Justice.

3

Q.

1

2

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

#### What is an Energy Justice framework?

A. The framework of Energy Justice centers on human dignity by viewing access to energy as a human right, meaning everyone should be able to utilize life-sustaining amounts of energy regardless of their ability to pay. This implies access to energy should only be restricted in extreme circumstances (e.g., disconnection).<sup>2</sup> Energy Justice promotes specific values and considerations that have historically been neglected in the regulatory process.

Energy Justice, or more broadly, environmental justice has grown out of the civil rights movement, the Indigenous environmental movement, and the antiglobalization movement.<sup>3</sup> What started with identifying specific instances of "environmental racism," for instance locating hazardous waste facilities in predominantly African-American neighborhoods, which had been ignored by the mainstream environmental movement, Energy Justice grew to recognize that the burdens and benefits of energy production are unequally distributed along familiar lines of marginalization (White vs. People of Color; global South vs. global North, low-income populations vs. the rest). From these origins, Energy Justice has not only

<sup>3</sup> Alejandro Colsa Perez et al., 2015, "Evolution of the Environmental Justice Movement," Environmental Research Letters Volume 10, https://iopscience.iop.org/article/10.1088/1748-9326/10/10/105002/pdf.

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

<sup>&</sup>lt;sup>2</sup> Resolution, First National People of Color Environmental Leadership Summit held on October 24-27, 1991, <u>https://climatejusticealliance.org/ej-principles/</u>.

become widely recognized throughout society<sup>4</sup> but has been transformed by
academics into an analytical framework that can guide thinking about policy and
regulation regarding energy. The main insight is this: decisions about energy, like the
ones in this rate case, "involve aspects of equity and morality that are seldom explicit
in contemporary energy planning and analysis."<sup>5</sup> Energy Justice as a tool seeks to
make these aspects explicit by considering the following three issues:<sup>6</sup>

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

 Recognition Justice requires identifying communities that have been ignored, misrepresented, or not represented at all in energy decisions. This requires analyzing comprehensively how issues like disconnections or prices affect differentiallysituated groups along ethnic, racial, and socio-economic lines differently. Recognition Justice forces us to consider that residential customers are in fact not homogenous individuals but groups of customers that experience the same tariffs and policies very differently.

2) Procedural Justice requires that all groups can meaningfully participate in energy decisions that affect them. Procedural Justice forces us to consider who holds power in decision-making processes not only in terms of legal rules but also in actual practice. For decision-makers, Procedural Justice suggests considering a diversity of

<sup>&</sup>lt;sup>4</sup> See for instance, Presidential Executive Order in 1994: Bill Clinton, 1994, "Executive Order 12898 of February 11, 1994," Federal Register 59 (32), <u>https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf</u>; or the current <u>Website</u> of the US Department of Energy.

<sup>&</sup>lt;sup>5</sup> Benjamin K. Sovacool and Michael H. Dworkin, 2015, "Energy justice: Conceptual Insights and Practical Applications," Applied Energy, Volume 142, p. 435, <u>https://doi.org/10.1016/j.apenergy.2015.01.002</u>.

<sup>&</sup>lt;sup>6</sup> Kirsten Jenkins et at., 2016, "Energy justice: A Conceptual Review," Energy Research & Social Science, Volume 11, <u>https://doi.org/10.1016/j.erss.2015.10.004</u>.

voices and perspectives, especially those that have been historically marginalized, instead of solely relying on the well-resourced perspectives that always show up loudly.

3) **Distributive Justice** requires that benefits and burdens of energy decisions are distributed somewhat equally with regard to outcomes ("equitably") considering the differential ability of different customers to contribute. Distributive justice means that if affordability is a goal, we need to make energy affordable to those that are rich and those that are poor.

#### Q. How is Energy Justice related to existing regulatory principles?

A. Utility law in general, and in Oregon specifically, requires OPUC to regulate utilities to protect the public interest.<sup>7</sup>

We can look at the legislative and regulatory climate in Oregon to understand what factors OPUC should consider when arriving at what's in the public interest. I find that those are Energy Justice principles:

 Oregon Executive Order No. 20-04 orders OPUC to 5 B (3) "[...] exercise its broad statutory authority to reduce Greenhouse Gas (GHG) emissions, *mitigate energy burden experienced by utility customers*, and ensure system reliability and resource adequacy;" and (6) "in cooperation with Oregon Housing and Community Services, establish a public process to address and mitigate *differential energy burdens* and other inequities of affordability and

<sup>7</sup> ORS 756.040 (1).

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

1	environmental justice, including rate design and other programs to mitigate
2	energy burden." <sup>8</sup>
3	- HB 2475, passed in 2021, explicitly authorizes OPUC to take steps to mitigate
4	energy burdens by requiring utilities to set differential rates to ensure low-income
5	customers can afford access to energy. <sup>9</sup> This law also provides financial
6	assistance for the representation of low-income residential customers and the
7	interest of residential customers that are members of environmental justice
8	communities in rate cases. The only reason I can see for such a provision is that
9	the Oregon Legislature wants OPUC to seriously consider Energy Justice factors
10	when deciding what is in the public interest.
11	- HB 4077, passed in 2022, establishes an environmental justice council to advise
12	the Governor. <sup>10</sup>
13	- Oregon's DEI Action Plan specifically calls out the role of OPUC to "engage,
14	protect, and advance benefits to vulnerable communities."11
15	Taken together, this indicates that regulating in the public interest means
16	considering Energy Justice factors. However, as I explain below, Avista's proposed
17	rates and testimony do not take into account these factors sufficiently.
	<sup>8</sup> Governor Kate Brown, March 10, 2020, pp. 8-9, <u>https://www.oregon.gov/gov/eo/eo_20-04.pdf</u> (emphasis added).
	<sup>9</sup> https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2475.
	<sup>10</sup> https://olis.oregonlegislature.gov/liz/2022R1/Downloads/MeasureDocument/HB4077.
	<sup>11</sup> <u>https://www.oregon.gov/das/Docs/DEI_Action_Plan_2021.pdf</u> , p. 26.
	Earthjustice

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

#### **Q.** How is Energy Justice related to just and reasonable rates?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

A. In my opinion, integrating Energy Justice principles into utility rate design and the revenue requirement is needed to determine whether a proposed increase in rates is fair, just, and reasonable. These are not technical terms that can be calculated with sufficient data, but instead raise questions of distributive justice.

The OPUC itself states that "the legislature has expressed no specific process or method the Commission must use to determine the level of just and reasonable rates[.]"<sup>12</sup> In light of the requirements of Executive Order 20-04, and HB 2475, the Commission should take into account energy justice principles in evaluating Avista's proposal for a rate as follows:

In reviewing Avista's petition for a rate increase, the Commission must consider the ability of residential customers to afford this increase. Unfortunately, I find that Avista's rates, as they are currently implemented, are not affordable to at least 12,000 low-income customers, who are eligible but not enrolled in the bill discount program. This problem will be exacerbated by the rate increase. Furthermore, a subset of non-average customers remains energy-burdened despite enrollment in the bill discount program.<sup>13</sup> Leaving low-income customers with unaffordable bills is neither just nor reasonable. The terms "just" and "reasonable" cannot be determined only with respect to the average customer, but needs to take into account differentially situated groups. It's hardly

<sup>&</sup>lt;sup>12</sup> OPUC Order No. 08-487.

<sup>&</sup>lt;sup>13</sup> It is unknown how many non-low-income customers are energy-burdened.

1	reasonable or fair to assume that a natural gas rate will affect a millionaire and a
2	family in poverty similarly. Hence, different accommodations must be made.
3	• Avista is disconnecting customers without enrolling them in arrearage
4	management programs, even when these customers are known to qualify for
5	enrollment. Disconnecting households due to inability to pay is neither just nor
6	reasonable. Utilities are publicly regulated because they provide an "essential
7	service," and rates charged by these companies must be in the public interest for
8	all customers regardless of their income level. Energy Justice principles provide
9	that access to energy is a fundamental right that should only be abridged in
10	extreme circumstances. <sup>14</sup> Simply being in debt is no such extreme circumstance.
11	Energy insecurity is detrimental to families, creates mortality risks and directly
12	affects health of families, with huge costs to society at large. <sup>15</sup> Unfortunately, I

<sup>14</sup> Jean Su, 2021, "Climate, Environmental, and Energy Justice: Integrating Justice into Electricity System Design and Decision-Making," in: Chandra Farley et. al, Advancing Equity in Utility Regulation, Future of Electric Utility Regulation, Report No. 12, US Department of Energy, 2021, https://escholarship.org/uc/item/1mr715sx, pp. 82-83.

<sup>15</sup> Simply put, when families are forced to choose between paying utility bills or other competing priorities, they are forced to cut back on essentials like food, medicine, or sufficient heating/cooling. This results in measurably negative outcomes. High utility bills are also an independent contributor to eviction and homelessness. In my opinion, preventing these outcomes is not only good for individuals directly affected but society at large because it reduces negative externalities down the line (i.e., prevention is cheaper). Furthermore, thriving families have many positive externalities. Kay Jowers, et al., 2021, "Housing Precarity & the Covid-19 Pandemic: Impacts of Utility Disconnection and Eviction Moratoria on Infections and Deaths Across U.S. Counties," NBER Working Paper 28394, http://www.nber.org/papers/w28394; Diana Hernandez and Eva Siegel, 2018, "Energy insecurity and its ill health effects: A community perspective on the energy-health nexus in New York City," Energy Res. Soc. Sci, Volume 47,

https://doi.org/10.1016%2Fj.erss.2018.08.011; John Cook et al., 2008, "A brief indicator of household energy security: associations with food security, child health, and child development in US infants and toddlers," Pediatrics, Volume 122 (4), https://doi.org/10.1542/peds.2008-0286. Diana Hernandez, 2016, "Understanding 'energy

find that Avista's rates, as they are currently implemented, do disconnect households that are unable to pay. This problem will be exacerbated by the rate increase.

# Q. What is missing from Avista's proposal and testimony from the perspective of recognition justice?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

A. Recognition justice requires us to consider how differentially-situated groups might experience uniform rates and policies. In opening testimony, Avista CEO Dennis Vermillion explains, "We are placing emphasis upon our customer focus as being central to all that we do to ensure our services are safe, responsible, and affordable,"<sup>16</sup> Despite this positive intention, Avista's petition does not evaluate how low-income customers will be affected by its proposed increase. Instead, residential customers are treated as a homogenous group, even though they are not.

Recognition justice requires that (1) Avista document and consider how its rate increase will aggravate the energy affordability gap, and the number of energyburdened customers. (2) Assess disconnection rates separately for different socioeconomic groups, including for low-income customers specifically. Unfortunately, over 2,800 pages of testimony do not mention disconnections at all. (3) The Commission should ensure that low-income customers are not required to pay for

insecurity' and why it matters to health," Soc. Sci. Med., Volume 167, https://doi.org/10.1016%2Fj.socscimed.2016.08.029; Michelle Graff et al., "Climate Change and Energy Insecurity: A Growing Need for Policy Intervention," Environmental Justice, Volume 15 (2), https://www.liebertpub.com/doi/abs/10.1089/env.2021.0032; Sonal Jessel, Samantha Sawyer, and Diana Hernandez, 2019, "Energy, Poverty, and Health in Climate Change: A Comprehensive Review of an Emerging Literature," Public Health, Volume 7, https://doi.org/10.3389/fpubh.2019.00357.

<sup>&</sup>lt;sup>16</sup> Ex. Avista/100, Vermillion/4, this proceeding.

infrastructure investments that don't benefit them, like customer growth expenditures for line extension subsidies and risky and expensive new technologies like renewable natural gas, or hydrogen blending.

Q. What is missing from Avista's proposal and testimony from the perspective of procedural justice?

A. With regards to procedural justice, let me note that it is difficult for low-income ratepayers to participate in these proceedings. Low-income ratepayers often lack the time, resources, and expertise required to participate in contested proceedings. While the Commission may hear from the public through the public comment period, in making its decision on the petition, the Commission typically relies on evidence presented by the parties—rather than comments made by the public during the hearing process.

In light of this, I recommend that the Commission require Avista to convene stakeholder meetings with the Low-Income Advisory Council (LAIC) prior to submitting a petition for a rate increase and incorporate their suggestions in testimony. While it is true that Avista regularly consults with various community and environmental justice groups, those opportunities are often narrowly tailored to specific "low-income" issues. For instance, Avista meets with community action agencies and other stakeholders to discuss the administration of the bill discount program as well as low-income weatherization issues.<sup>17</sup> Avista also maintains an

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

<sup>&</sup>lt;sup>17</sup> I attend those meetings.

1		"Equity Advisory Group" in Washington. <sup>18</sup> Given that a rate increase has the
1		Equity Advisory Group in wasnington. Given that a rate increase has the
2		potential to increase energy burden for existing low-income ratepayers, it is critically
3		important to inform the LAIC of Avista's proposal to increase rates, and obtain
4		feedback from that group prior to filing a petition for a rate increase. Feedback must
5		be elicited not only on "low-income" issues, but all the main parts of the proposal
6		since those inform the rate increase and how the impact of a rate increase on low-
7		income customers can be limited.
8		<u>INVESTMENT RISK</u>
9	Q.	Why and how are Energy Justice considerations relevant for Avista's capital
10		investment decisions?
11	A.	The main issue is how the risks of investment decisions are distributed among all
12		company stakeholders (including customers), and who is able to bear those risks. Due
13		
15		to efforts to stop climate change, regulators in Oregon have imposed strict GHG
14		to efforts to stop climate change, regulators in Oregon have imposed strict GHG emission reduction targets on gas utilities. In this new situation, any investment in
14		emission reduction targets on gas utilities. In this new situation, any investment in
14 15		emission reduction targets on gas utilities. In this new situation, any investment in acquiring more customers becomes risky, but low-income customers face higher
14 15 16		emission reduction targets on gas utilities. In this new situation, any investment in acquiring more customers becomes risky, but low-income customers face higher risks.
14 15 16 17		emission reduction targets on gas utilities. In this new situation, any investment in acquiring more customers becomes risky, but low-income customers face higher risks. For the average residential customer, if Avista makes risky investment choices
14 15 16 17 18		emission reduction targets on gas utilities. In this new situation, any investment in acquiring more customers becomes risky, but low-income customers face higher risks. For the average residential customer, if Avista makes risky investment choices that result in ballooning utility rates, electricity provides a near-perfect substitute for

<sup>&</sup>lt;sup>18</sup> Avista Advisory Groups, <u>https://www.myavista.com/-/media/myavista/content-documents/about-us/ceta/avista-advisory-groups.pdf</u>.

customer account with the gas utility. They have now been insulated from the company's investment risks.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

Not so the average low-income residential customers. They cannot afford to electrify their home energy usage. Furthermore, they are likely to be a renter and not legally allowed to convert their dwelling from natural gas to electricity. Clearly, the risks of Avista's investment choices are much higher for low-income customers. A situation like that is neither just nor reasonable. Steps must be taken to insulate lowincome customers from these regulatory risks.

**Q.** What are the risks that Avista needs to protect low-income customers from?

A. Ballooning natural gas costs, coupled with average customers leaving the natural gas system, are a distinct possibility. These risks are due to the regulatory landscape. The figure below shows Avista's projected GHG emissions in Oregon compared to allowed emissions. This is quite obviously a problem; solutions might be extremely costly.

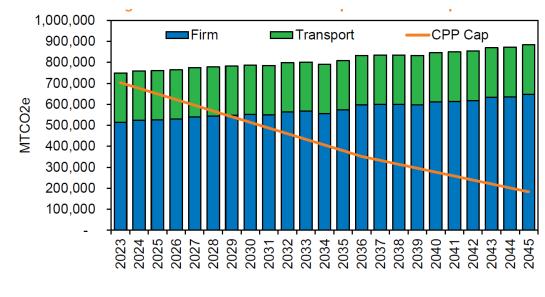


Figure 1: Emissions Forecast Compared to CPP Cap, Avista 2023 Gas IRP

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

Recent modeling by the American Council for an Energy-Efficient Economy (ACEEE)

finds that compliance will indeed be very costly.<sup>19</sup> The primary author explains,

continued investment in gas utility service is high risk:

Electrification is likely the most cost-effective decarbonization strategy for most buildings. Businesses and households that remain on the gas system could see a significant increase in their bills going forward. [...] Utilities and their regulators should start planning now to avoid costly gas pipeline replacements and assist households that are overburdened by energy costs with the transition off planetwarming fuels.<sup>20</sup>

This perspective is underlined by Avista's estimation of fuel costs in its 2023 integrated

resource plan (IRP). Even in 2045, various climate-friendly fuels are estimated to cost 3x

Year	Hydrogen	Dairy	Food Waste	LFG	Wastewater	Synthetic Methane	AECO
2025	\$35.43	\$36.84	\$50.43	\$9.62	\$16.68	\$48.35	\$3.43
2030	\$25.20	\$41.05	\$56.15	\$10.72	\$18.54	\$32.90	\$3.03
2035	\$19.05	\$45.72	\$62.49	\$11.93	\$20.60	\$30.48	\$3.55
2040	\$16.09	\$50.92	\$69.56	\$13.28	\$22.91	\$23.13	\$4.19
2045	\$12.19	\$56.71	\$77.43	\$14.79	\$25.47	\$14.84	\$5.05

"Regular" Natural Gas

Figure 2: Resource Price Comparisons, \$/Dth, 2023 Avista IRP

to 15x of natural gas. If this is true, it would seem likely that only the hardest to electrify industrial sectors would continue using these expensive fuels. As I discussed above, lowincome customers will not be able to afford to insulate themselves from these cost risks via electrification.

18 19

14

15

16

17

Low-income customers also need to be insulated from investing in these high-

risk speculative technologies. Low-income customers categorically should not be

1

<sup>&</sup>lt;sup>19</sup> S. Nadel, 2023, "Impact of Electrification and Decarbonization on Gas Distribution Costs," ACEEE, <u>https://www.aceee.org/sites/default/files/pdfs/U2302.pdf</u>.

<sup>&</sup>lt;sup>20</sup> Id.

	1	
1		required to contribute to connecting new customers (line extension allowance)
2		because in the current regulatory climate this is a very risky investment. Because they
3		are often renters, or are unlikely to be new-home buyers, low-income customers are
4		unlikely to benefit from these customer growth subsidies. Consequently, they should
5		also not be required to contribute to them.
6	Q.	How can low-income customers be protected from these risks?
7	A.	I have several proposals:
8	•	Do not allocate the costs of line extensions to low-income customers. These customer
9		growth subsidies typically do not benefit low-income customers, and increase rates.
10		Given that there is no low-income customer class, it might be more practical to
11		eliminate this costly subsidy altogether.
12	•	Protect low-income customers from ballooning costs risk by adjusting the bill
13		discount program to keep bills affordable. It is likely that many future rate increases
14		will not be subject to general rate revisions, but be passed on through various
15		automatic adjustment clauses. Hence, Avista should be required to review and adjust
16		its discount tiers and amounts every two years to ensure that they have kept up with
17		rising costs.
18	•	Low-income ratepayers should not be required to pay for high-risk technologies like
19		synthetic methane and green hydrogen. This is especially the case when Avista is not
20		investing in least-cost decarbonization solutions like electrification, and low-income
21		weatherization that reduce gas demand at a fraction of the cost.

Allow cost-effective home electrification within the AOLIEE program. This is the best way to protect low-income households from the increasing risks of the natural gas system.

AFFORDABILITY

5 **Q**. How do you define affordability and how is it related to energy burden? 6 A. Any ask for affordability needs to operationalize the concept in some way. One 7 common way is energy burden. An array of energy affordability advocates have 8 established that spending 6% of household income on energy (a 6% "energy burden") 9 constitutes a threshold or metric for the affordability of energy costs.<sup>21</sup> The 6% 10 energy burden was established by considering that households should spend no more than 30% of their incomes on all costs of housing, and energy should comprise no 12 more than 1/5 of total housing costs. Gas bills are of course only part of a household's 13 energy costs, so some fraction needs to be applied. I set gas affordability at 3% of 14 gross income. In its low-income need assessment, Avista too considers households to 15 be energy-burdened if they spent more than 3% of their income on natural gas utility service.<sup>22</sup> In the following, I refer to customers as energy-burdened if they spend 16 17 more than 3% of their gross income on natural gas. Affordability, in turn, is 18 operationalized as a situation where no one is energy-burdened. 19 0.

20

1

2

3

4

11

How did you determine whether Avista's energy rates meet the affordability criteria you laid out in the previous section?

<sup>&</sup>lt;sup>21</sup> Marilyn Ann Brown et al., 2020, "Low-Income Energy Affordability: Conclusions from a Literature Review," US Department of Energy, https://www.osti.gov/biblio/1607178.

<sup>&</sup>lt;sup>22</sup> Ex. Environmental Intervenors/403, Springer/11, Avista LINA.

A. I used publicly available data to estimate how many customers are energy-burdened and how large that burden is. I compared theoretical affordability to actual affordability: for instance, a low-income customer might in fact be able to afford gas utility service, if they are enrolled in the appropriate bill discount tier. However, if they are not enrolled, they will remain energy-burdened. I also construct illustrative examples that show the types of situations where energy burden might arise under the current rates (e.g., high usage). This allows us to arrive at specific recommendations on changes that need to be made for affordability. In each section, I explain what specific data and procedures were used.

1

2

3

4

5

6

7

8

9

10

11

22

23

### Q. Why does your affordability analysis focus on low-income customers and how is low income defined?

12 I focus on populations below 60% of State Median Income (SMI) or 200% of Federal A. 13 Poverty Level (FPL). Those are the households most likely to have issues with 14 affordability. These are also levels for which data is most commonly available. 15 However, it is important to note that actual poverty is more complicated. There are 16 people that earn incomes above these thresholds but still struggle to pay for energy 17 bills because of their life circumstances. At the same time, there are people below 18 these poverty thresholds that are not energy burdened, such as people with high 19 earning potentials that are currently unemployed (e.g., a neurologist taking a year off 20 from work) and people with little income but a large number of assets to tap in for 21 emergencies.

Focusing on income thresholds in terms of SMI and FPL is a necessary simplification to be able to look at data. Let me explain those terms now. US Census

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

Bureau data generally bins income data into categories based on a percentage of the Federal Poverty Level (FPL). Eligibility for most federal assistance programs, for instance Medicaid or SNAP, is commonly expressed as a percentage of FPL, adjusted for household size. FPL thresholds were developed in the 1960s based on food expenditures and have since only been adjusted for inflation.<sup>23</sup> As a result, FPL is somewhat outdated as a measure of income necessary for self-sufficiency and many programs now consider households at 200% of FPL as poor and in need of instance (e.g., the federal Weatherization Assistance Program in Oregon).

Many state programs, including Avista's bill discount program, use a percentage of State Median Income (SMI), most commonly 60%, to define low income. SMI percentage thresholds do not refer to actual percentiles of the income distribution, but instead to an administratively prescribed proportion of median income. Adjustments for household size are also made based on fixed percentages found in federal rules. The table below provides an overview of this classification scheme. As you can see, 200% of FPL and 60% of SMI are somewhat comparable. While adjustment for household size makes sense, it complicates assessments of the low-income population. Avista knows the size of every customer's bill, but does not know their household size. Because of that, arriving at the number of low-income customers and their energy burden needs to rely on surveys or estimation/imputation through third-party data (e.g., credit ratings).

<sup>&</sup>lt;sup>23</sup> Gordon M. Fisher, 1992, "The Development and History of the Poverty Thresholds, "*Social Security Bulletin*, Vol. 5 (4), <u>http://www.ssa.gov/history/fisheronpoverty.html</u>.

	60% of SMI <sup>1</sup>	200% of FPL	150% of FPL	40% of SMI	100% of FPL <sup>1</sup>	20% of SMI	50% of FPL	5% of SMI
1 person HH	\$31,265	\$29,160	\$21,870	\$20,843	\$14,580	\$10,422	\$7,290.0	\$2,605
2 person HH	\$40,885	\$39,440	\$29,580	\$27,257	\$19,720	\$13,628	\$9,860.0	\$3,407
3 person HH	\$50,505	\$49,720	\$37,290	\$33,670	\$24,860	\$16,835	\$12,430.0	\$4,209
4 person HH	\$60,126	\$60,000	\$45,000	\$40,084	\$30,000	\$20,042	\$15,000.0	\$5,011
5 person HH	\$69,746	\$70,280	\$52,710	\$46,497	\$35,140	\$23,249	\$17,570.0	\$5,812

Figure 3: Comparison of FPL and SMI in 2023.

#### Q. How many customers in Avista's service territory are energy burdened?

A. Poverty rates are above average for Oregon in the five counties with Avista presence. According to data from the American Community Survey, there are 74,439 households below 200% of FPL.<sup>24</sup> Comparing their energy bills to income shows that low-income households in these five counties are over \$48 million short of not being energy burdened (Energy Affordability Gap).<sup>25</sup> This is substantially more than utility, state, and federal spending taken together. On average, each household would need around \$646 in assistance. This is shown in Figure 2.

Union	Klamath	Jackson	Josephine	Douglas	Total
\$2,797,395	\$9,397,590	\$17,823,884	\$9,619,737	\$8,414,338	\$48,052,944
3,857	12,395	32,265	15,832	10,090	74,439

<sup>11</sup> 

12

1

2

3

4

5

6

7

8

9

10

Figure 4: Households below 200% of FPL and Energy Affordability Gap

<sup>24</sup> Energy Equity Project Planning Tool, 2023, <u>https://rahulab.shinyapps.io/EEP\_planning\_tool/</u>.

<sup>&</sup>lt;sup>25</sup> Applying a 6% threshold to their total energy costs.

If we focus just on Avista customers and the proportion of Avista's responsibility, the picture looks less grim.<sup>26</sup> Avista commissioned a report called "Oregon Energy Burden Assessment," published in June 2022.<sup>27</sup> This report estimates that there is an Energy Affordability Gap of \$1.8 million. As can be seen in Figure 3, I estimate that Avista currently spends around \$1 million on bill discounts and LIHEAP contributes around 302,000. This leaves a gap of around \$457,000 annually. Some of that gap can be explained by insufficient enrollment.

Customers Energy **Bill Discount** Avista LIHEAP Gap below 60% Affordability Enrollment Spending<sup>29</sup> Spending<sup>30</sup> \$/people of SMI<sup>28</sup> Gap \$1,800,000 17.000 \$457,205/ 5.086 \$1,040,745 \$302,050 11,914

8

9

10

1

2

3

4

5

6

7

Figure 5: Energy Affordability Gap Among Avista Customers

### Q. What is the current structure of Avista's bill discount rate and how can it be accessed?

11 A. Avista's bill discount program, called "my energy rate," has four discount tiers for

customers based on their gross income as percentage of SMI:

13

12

0-5% of SMI: 90%

<sup>26</sup> A customer can have an affordable natural gas bill, but still be energy-burdened considering their total energy bills.

<sup>27</sup> Ex. Environmental Intervenors/403, Avista LINA.

<sup>28</sup> Id.

<sup>29</sup> Extrapolated from PY Quarter 2 data. Set the two winter quarters at 100%, the summer quarters at 60%. A more accurate calculation could be done with actual billing data.

<sup>30</sup> FY 2019. Amounts during Covid are not representative of current levels of federal funding.

https://public.tableau.com/app/profile/oregon.housing.and.community.services/viz/EnergyDa shboard 16117046261640/LandingPage.

- 6-20% of SMI: 60%

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

A.

- 21-40% of SMI: 25%

- 41-60% of SMI: 15%

There are two main ways customers access this assistance program. First, recipients of federal energy assistance are automatically enrolled. Oregon Housing and Community Services shares income information directly with Avista in order to enroll customers in the correct tier. Currently, about half of the customers were enrolled through this mechanism.<sup>31</sup> Second, customers can also enroll proactively through the following options: company website, calling customer service, mailing an application, or contacting a community action agency. Customers who use this option self-attest their income.

#### Q. Is the average Avista gas utility bill affordable to low-income customers?

At existing rates, the bill discount program does a decent job of keeping the average bill affordable to low-income customers. However, it can only do so, if they are actually enrolled in the program. Further, this analysis does not account for Avista's proposed rate increase.

To assess the sufficiency of the bill discount program, I looked at theoretical households. Figure 4 shows the affordability gap for households with different sizes and different income levels for average bills. The overall average bill is \$670/year. I adjusted for a one-person household at 80% and a 3-person household at 120%. As you can see, the discount tiers generally do a good job of keeping energy affordable.

<sup>&</sup>lt;sup>31</sup> Reporting in RG 100, <u>https://edocs.puc.state.or.us/efdocs/HAQ/rg100haq141729.pdf</u>.

Negative numbers indicate a discount that is higher than required by the energy burden calculation. Positive numbers indicate the amount of money missing annually to not be energy burdened.

Income/Household Size	One	Two	Three
5% of SMI	\$-24.56	\$-35.21	\$-45.86
10% of SMI	\$58.08	\$63.58	\$69.08
21% of SMI	\$73.72	\$73.21	\$72.70
41% of SMI	\$-80.40	\$-100.50	\$-120.60

4

5

6

7

8

9

10

11

12

13

15

16

17

18

1

2

3

Figure 6: Energy Affordability Gap After Applying Discount (+), Excessive Discount (-)

This theoretical exercise helps us identify potential problem areas for affordability. Households that are just above the income threshold for receiving the highest discount remain somewhat burdened, albeit only by a few dollars a month. The same is true for households at 21% of SMI, who earn a little too much to receive the 60% discount. On the other end, customers at 60% of SMI receive more assistance than is needed to keep the average bill affordable (up to around \$10/month). This is not necessarily an undesirable effect since the ability to pay is an important fairness consideration. However, it is important to keep in mind that not every dollar goes directly to relieve energy burden.

14

**Q**.

#### What other forms of assistance are available to low-income customers?

A. Avista's "my energy rate" includes an arrearage management program.
Customers with debts of up to \$1000 can receive forgiveness (<20% of SMI) or discounts if they make regular payments (21% - 60% of SMI). This program can be accessed by calling customer service or through a community action agency.</li>

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

1		Avista also offers assistance for hardships or emergencies, so-called "project				
2		share." The amount of assistance offered through this program and the criteria are				
3		unknown to the public.				
4		The other main assistance available to customers is the federal Low-Income				
5		Home Energy Assistance Program (LIHEAP). This assistance is administered by				
6		Oregon Housing and Community Services, which contracts with community action				
7		agencies for service delivery. Assistance is available to households below 60% of				
8		SMI, subject to availability (Assistance is available to about 17% of eligible				
9		households based on current funding levels). Assistance amounts are calculated				
10		according to a matrix that considers heating source and income, but not bill amounts.				
11	Q.	Why are there low-income and energy-burdened customers who cannot access				
11	<b>V</b>	why are there low-income and energy-durdened customers who cannot access				
11	Q.	Avista assistance programs and what are the consequences?				
	Q. A.					
12		Avista assistance programs and what are the consequences?				
12 13		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible				
12 13 14		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible customers in its low-income bill-discount program. Avista commissioned a report				
12 13 14 15		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible customers in its low-income bill-discount program. Avista commissioned a report called "Oregon Energy Burden Assessment," published in June 2022. <sup>32</sup> This report				
12 13 14 15 16		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible customers in its low-income bill-discount program. Avista commissioned a report called "Oregon Energy Burden Assessment," published in June 2022. <sup>32</sup> This report estimates that there are 17,000 customer households below 60% of SMI, eligible for				
12 13 14 15 16 17		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible customers in its low-income bill-discount program. Avista commissioned a report called "Oregon Energy Burden Assessment," published in June 2022. <sup>32</sup> This report estimates that there are 17,000 customer households below 60% of SMI, eligible for the bill discount program. Unfortunately, only 30% (5086) are enrolled. <sup>33</sup> Those				
12 13 14 15 16 17 18		Avista assistance programs and what are the consequences? Avista's own studies show that the company has failed to enroll 70% of eligible customers in its low-income bill-discount program. Avista commissioned a report called "Oregon Energy Burden Assessment," published in June 2022. <sup>32</sup> This report estimates that there are 17,000 customer households below 60% of SMI, eligible for the bill discount program. Unfortunately, only 30% (5086) are enrolled. <sup>33</sup> Those eligible but not enrolled in the bill discount might be at risk of disconnection or may				

<sup>&</sup>lt;sup>32</sup> Ex. Environmental Intervenors/403, Avista LINA.

<sup>&</sup>lt;sup>33</sup> ADV 1410 – Avista Utilities Quarterly Report, April 2023.

program. It is fundamentally unfair to not enroll customers in the correct bill discount tier, especially since all residential ratepayers are contributing to the program financially.

Separately, with regard to the Arrearage Management/Forgiveness Program, likewise Avista is not enrolling eligible ratepayers into this program either, which may result in service disconnection. The number of currently eligible customers is not known, but we can look at those enrolled in the bill discount program as an illustration of the problem. There are 752 enrollees in the bill discount program with a past due bill over 60 days, making them eligible for arrearage management or forgiveness.<sup>34</sup> However, Avista has only enrolled 103 of them in that assistance program. This situation is problematic. There are 649 customers at risk of disconnection, even though the company knows that they are eligible for assistance. These ratepayers should be automatically enrolled in the Arrearage Management Program, to prevent disconnection. Service disconnection is a harsh penalty for a lowincome customer to pay when they qualify for existing support.

The simple answer to the question of why enrollment is too low is that Avista is insufficiently proactive about the issue. Low program enrollment is especially a problem when low-income households are expected to complete numerous procedural steps before qualifying for aid. Households in poverty experience difficulty accessing programs like weatherization programs, arrearage management, or discounted rates, be it due to a lack of information or lack of time. Living in poverty, including

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

<sup>21</sup> 

<sup>&</sup>lt;sup>34</sup> Company Presentation, April 2023.

juggling jobs and family, competing and unaffordable bills, as well as managing bureaucratic hurdles, tends to be a huge tax on cognitive capacity and time.<sup>35</sup> Households in poverty have to overcome several hurdles: they need to know about the program, they need to assess whether it might help them, and they need to actually enroll, completing the documentation requirements that come with it. Furthermore, trust is a difficult issue since low-income households are a frequent target of scams and might have experienced disappointment from assistance providers in the past.<sup>36</sup> Transparency is often lacking. Fragmented programs and complicated rules make it hard to know whether one is eligible for a program and what the anticipated benefits are. Given the time and cognitive constraints these households face, low enrollment is not surprising.<sup>37</sup>

Many customers that come to community action agencies report never having heard of the bill discount program. Some clients that came to us reported that Avista customer service told them they needed to go to community action agencies to enroll in the bill discount program, even though they can actually self-enroll online. Transparency is another issue. Community action agency employees have been told

16

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

<sup>35</sup> Annie Lowrey, 2021, "The Time Tax," The Atlantic, <u>https://www.theatlantic.com/politics/archive/2021/07/how-government-learned-waste-your-time-tax/619568/</u>.

<sup>&</sup>lt;sup>36</sup> For example: KKTV, 2022, "Experts Warn About Scams Targeting Public Housing Seekers" <u>https://www.kktv.com/2022/09/14/experts-warn-about-scams-targeting-public-housing-seekers/</u>; or Wendi Gosliner et al., 2020, Participants' Experiences of the 2018–2019 Government Shutdown and Subsequent Supplemental Nutrition Assistance Program (SNAP) Benefit Disruption Can Inform Future Policy," Nutrients, Volume 12 (6), <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7353319/</u>.

<sup>&</sup>lt;sup>37</sup> Evan Nesterak, 2013, "The Cognitive Burden of Poverty," Behavioral Scientist, <u>https://behavioralscientist.org/the-cognitive-burden-of-poverty/</u>.

by Avista to not inform the public about available discount tiers.<sup>38</sup> Avista's website comes with its own issues. Customers cannot learn about the program without first logging into their account or providing their address, while calling Avista can be a major time commitment.

#### Q. Are the assistance programs sufficient to avoid disconnections of low-income customers?

A. No. Average bills can be affordable. Unfortunately, many customers are not enrolled in the programs that achieve this affordability. Furthermore, bills are often unaffordable for above-average low-income users. As a result, disconnection is not the rarity it should be. In April alone, Avista disconnected 232 customers for nonpayment.<sup>39</sup> Avista does not publish its own data on the likelihood that any of those are low-income customers. But probably quite a few are. Seventeen were receiving federal energy assistance at the time of the disconnect.

#### Q. How can disconnections be reduced?

15 A. Avista should automatically enroll qualified customers into its bill discount program, 16 and its arrearage management program. Avista should also examine its data to 17 determine if a customer with a disconnection notice likely qualifies for assistance 18 (discount and arrearage management). If they do, automatically enroll them in such 19 assistance programs instead of trying to reach them to ask whether they would like to 20 have assistance instead of being disconnected. If the status of the customer is undetermined, work with community action agencies (or other community-based

21

1

2

3

4

5

6

7

8

9

10

11

12

13

14

<sup>&</sup>lt;sup>38</sup> Ex. Environmental Intervenors/404, Avista Email.

<sup>&</sup>lt;sup>39</sup> https://edocs.puc.state.or.us/efdocs/HAO/ro12haq132544.pdf.

partners) on an intensive outreach plan. Nobody should be disconnected *before* personal contact was made in which someone explained how the household might qualify for assistance.

## Q. What changes would you recommend to help customers access the bill discount program?

A. Since we know what customers qualify for low-income bill discount programs, those individuals should automatically be enrolled in the program. Further, if a customer is already enrolled in Avista's bill discount program and has a past due account, they should automatically be enrolled in the Arrearage Management Program to prevent service disconnection.

We would recommend putting the burden on Avista to reach enrollment of at least 90% of those eligible by the end of program year two. The way to do that is for Avista to utilize the information it already possesses. According to Hassan Shaban, the author of the "Oregon Energy Burden Assessment" for Avista, his analysis assigned every customer a probability of being low-income and estimated an income range. Outcomes like this can be modeled based on internal data (e.g., payment history), census tract data (e.g., median income), county assessor data (e.g., housing characteristics), and purchased third-party data (e.g., income from credit bureaus). Avista should auto-enroll any customer that the discussed report identified as having an income below 60% of SMI. Such customers should then receive a communication that tells them how they can, with one click or phone call, enroll in the right discount tier, in case their income estimate was too high.

#### OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

1		We recommend similarly pro-active approaches in all program areas. For				
2	instance, customers known to qualify for arrearage forgiveness, should receive it					
3		automatically. Data should also be leveraged for planned audits. Currently, Avista				
4		plans to ask 3% of bill discount enrollees to verify their income. It is expected that				
5		many households will not reply to that request and will be unenrolled despite most				
6		likely being eligible. A data-driven approach is much preferable. Avista should				
7		identify integrity risk thresholds that trigger audits, not audit randomly.				
8	Q.	Isn't it better to require individuals to enroll themselves to prevent enrolling				
9		individuals who are not qualified in the program?				
10	A.	No. To answer that, we need to look at cost vs. benefit. If the enrollment was				
11		currently at 99%, I would agree. However, when we are missing 70% of those				
12		eligible, the harm of not enrolling people outweighs the cost of potential fraud. In my				
13		opinion, the cost of enrolling some ineligible people based on uncertainty in the data				
14		is much smaller than the cost of keeping many low-income customers energy				
15		burdened. Furthermore, relying on outreach to inform households is also expensive. I				
16		would rather have high enrollment and "lose" \$50,000 on non-energy-burdened				
17		customers, than have low enrollment, while spending \$50,000 on outreach.				
18	Q.	What are the outliers that might not be caught by the existing assistance system?				
19						
20						
21						
22						
	OPEN	ING TESTIMONY OF BENEDIKT SPRINGER 61 61 61 61 61 62 62 63 64 64 64 64 64 64 64 64 64 64				

DNY OF BENEDIKT SPRINGER

UG 461

A. Energy bills are not uniformly distributed. Energy use varies a lot based on factors 2 that households cannot influence, especially if they are low-income tenants. Even if the 3 median bill is affordable, 49% of above-median bills might not be. Hence, we are interested 4 in the right tail of the distribution in Figure 5, which is from Avista's "Oregon Energy 5 Burden Assessment". Some will be low-income clients; others might be owners of large

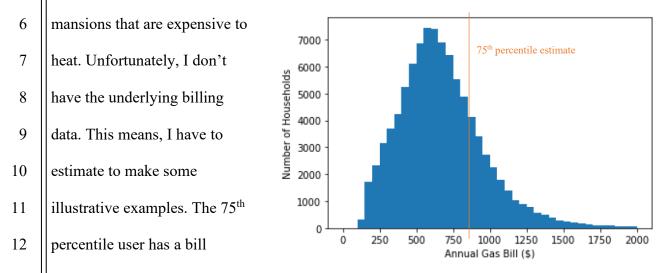
1

18

19

20

21



13 around \$850. I recreated the table from Figure 4 with this higher bill in Figure 6. The energy 14 burden of households between approximately 6% and 36% of SMI increases substantially. Now we are talking about more than a few dollars a month. At community action agencies, 15 16 we see customers, whose annual bills exceed \$1000. Those customers will have unaffordable 17 bills despite the discount program, especially if they fall into the identified income range.

5% of SMI	-\$10.16	-\$17.21	-\$24.26
10% of SMI	\$115.68	\$135.58	\$155.48
21% of SMI	\$181.72	\$208.21	\$234.70
41% of SMI	-\$62.93	\$-100.50	\$-120.60

Figure 8: Figure 9: Energy Affordability Gap After Applying Discount (+), Excessive Discount (-), non-Average Customer

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

**Q**.

A.

15

11

12

13

14

16 17 Q.

A.

18

proportionally to the increase.

action needs to be taken.

uncertain outcomes.

that in the next section.

Current Bill (annual)	Bill with 25% discount	New bill with 8.1% increase	New bill with 25% discount	Bill Increase with discount
\$680	\$510	\$735.08	\$551.31	8.1%

What should Avista do to address affordability problems with non-average bills?

As with the issue of enrollment, Avista already has all the data to address this. The

income of all bill discount program enrollees is known. Hence, energy burden can be

calculated. If the affordability gap exceeds more than a few dollars a month (>\$10),

The first simple step that could be taken would be to simply adjust the

individual discount amount to keep natural gas affordable. Alternatively, Avista could

work with community action agencies to get those customers enrolled in LIHEAP.

While community action agencies cannot prioritize these customers over others, they

could do more intensive outreach with Avista's help. However, it might be cheaper to

is especially important for very high bills (>\$1200 annually). I will address how to do

How will Avista's proposed rate increase affect energy burdened customers?

The problems will be the same with the proposed rate increase, but worse

The second step needs to be targeting these customers for weatherization. This

simply provide higher discounts instead of spending money on outreach with

20

19

21

translate dollar for dollar into an increase in energy burden. Below, I detail how low-

*Figure 10: A generic bill discount including Avista's proposed rate increase* 

For every household that is already energy-burdened, any increase in rates will

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

income rates will increase as a result of Avista's proposed rate hike. Every household that currently has an energy burden between 2.78% and 2.99% will cross the threshold to 3%. The number of households could be calculated with Census Bureau data.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Avista's opening testimony has provided no information on how its proposed increase in rates will exacerbate energy burden for its existing customers. Nor has Avista proposed any changes to its existing bill discount program to ensure rates remain affordable in light of the company's proposed increase. Using income data from the bill discount program enrollment, the company could estimate the new energy affordability gap. To show that the current proposal is just and reasonable, Avista should make a good faith effort to calculate these numbers.

#### **ENERGY EFFICIENCY**

#### **Q.** What is the connection between Energy Justice and Energy Efficiency?

 A. One main connection between Energy Justice and energy efficiency is that lowincome households pay for energy efficiency as ratepayers but often do not benefit as individuals. To access energy efficiency rebates customers must individually contribute a significant portion of the cost of an energy efficiency measure. Lowincome households cannot afford to do so. Furthermore, low-income households are much more likely to be renters. Energy efficiency upgrades are hard to achieve for renters since they are fundamentally an investment in the landlord's property.

Nevertheless, energy efficiency and weatherization is an important component of making gas utility service affordable for low-income ratepayers. Housing

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461

interventions that promote weatherization are among the most effective options to lower bill costs, improve housing conditions, and improve health outcomes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

It is well known that the federal Weatherization Assistance Program is as much an energy efficiency program as it is a homelessness prevention program because it preserves affordable housing stock. It is important that these larger societal benefits are taken into consideration when making choices about funding low-income energy efficiency.

**Q.** What Energy Efficiency programs does Avista offer to low-income households?

A. Avista has an Oregon Low-Income Energy Efficiency (AOLIEE) program which is operated by the community action agencies in its territory. This program serves households below 200% of FPL. According to the newest program rules, the program pays for any energy-efficiency measures with a grouped Savings-to-Investment ratio of 1 or more, and provides up to \$2,000 per household for administrative costs/program delivery to the agencies. Fuel switching, even if cost-effective, is not allowed.

Q. How could Avista's low-income energy efficiency program be improved from an Energy Justice perspective?

A. In calendar year 2022, AOLIEE served 39 households and spent \$437,490, about \$26 per low-income customers.<sup>40</sup> Only about 50% of the available funds were spent.<sup>41</sup> It is unclear why Avista chronically underfunding and underspending its low-income weatherization program. Low-income weatherization not only reduces Avista's GHG

<sup>40</sup> 2022 AOLIEE Report, <u>https://edocs.puc.state.or.us/efdocs/HAQ/rg81haq151254.pdf</u>.
<sup>41</sup> Advice No. 22-11-G, <u>https://edocs.puc.state.or.us/efdocs/UAA/uaa161151.pdf</u>.

emissions, but it also can alleviate energy burden and reduce poverty by making bills more affordable.

At minimum, Avista must spend all of its existing budget for its AOILEE program. It is unacceptable that low-income ratepayers cannot afford energy bills, and get disconnected from service, when Avista has existing money to spend on weatherizing homes. The Commission should order Avista to spend the total annual available funding for low-income customers.

Second, Avista should allow non-energy benefits to be better taken into account when determining what can be funded through the AOILEE program. Currently, only measures with a Savings-to-Investment Ratio larger than one plus some health and safety repairs are allowed.<sup>42</sup> This disregards the other important benefits that come with weatherization, like better health outcomes, more thermal comfort, and preservation of affordable housing stock. Weatherization workers often identify small, deferred maintenance and safety issues, that are hugely detrimental to the client, but cannot currently be justified as an allowable expense.

These benefits can be realized by giving delivery partners more flexibility in how to spend their health, safety, and repair budget (HSR). Currently, community action agencies interpret health and safety as defined by US Department of Energy rules. This means, health and safety generally refers to that of weatherization workers and contractors not dangers to the client (although the latter benefit incidentally). Alternatively, the spending must be justified as necessary to install the weatherization

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340

<sup>21</sup> 

<sup>&</sup>lt;sup>42</sup> Updated rules as of December 2022.

measure. In this framework, fixing a step that is a trip hazard would not be allowable, even though it would be beneficial. Delivery partners should be able to spend these funds on any interventions that provide the beneficial effects discussed above. This should include the ability to "buy-down" measures that fail the cost-effectiveness test but would increase comfort substantially.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Furthermore, since delivery partners work on a reimbursement-for-work basis, the 15% HSR cap is de facto a per-project cap. It would be best not to attach a specific percentage per project value on this budget, but instead, give the partners a yearly allowance that is more generous. This will allow them to make critical investments that reduce energy use, preserve affordable housing, and improve health.

Third, administrative funds need to be increased and distributed differently. As a per-project reimbursement, the funds do little to allow delivery partners to build capacity or conduct outreach to Avista customers. Instead, the funds are solely used for expenses directly associated with the project.

Overall, Avista should improve the program through these three changes. However, a simpler, more effective program design might be to contract with delivery partners for a set amount of weatherization projects over a multi-year period, without micro-managing all the details. The latter has much more of a chance to make a large difference.

Q. How can Avista change the implementation of its AOLIEE program to reduce
 GHG emissions while simultaneously reducing energy burden for ratepayers?
 A. The AOLIEE program can be utilized to simultaneously meet emission targets and

benefit vulnerable low-income customers. Avista should increase the budget for its

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461 *Earthjustice* 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340 AOLIEE program to \$3.5 million per year to reach the 3,500 highest potential customers over the next 10 years. Weatherization upgrades provide the greatest decarbonization benefit because they reduce energy consumption and make homes climate resilient. These are the best types of investments a utility can make to reduce GHG emissions, and energy burden for ratepayers. However, Avista greatly underfunds this program. Low-income weatherization is likely a far more cost-effective use of ratepayer funding than high-risk speculative technologies like synthetic methane and green hydrogen.

Avista's "Oregon Energy Burden Assessment" identified 3,570 customers as having high-energy burden and high-efficiency potential. At Avista's current rate of program implementation, it will take 92 years to reach all of them. Furthermore, nothing is currently done to proactively reach those customers that have already been identified as the best candidates.

As currently administered, community action agencies run weatherization programs, and request reimbursement from Avista's OLIEE program if one of their clients is an Avista customer. However, community action agencies do not target particular individuals for weatherization upgrades. Community Action Agencies often have long waitlists for service, making it hard to conduct this type of targeted outreach. Rather than placing this burden on community action agencies, Avista should proactively target customers with high energy burden in inefficient housing stock that have the potential to greatly benefit from energy efficiency upgrades. Targeting these customers for weatherization program funding would not only reduce

OPENING TESTIMONY OF BENEDIKT SPRINGER UG 461 Earthjustice 810 Third Ave. Suite 610 Seattle, WA 98104 (206) 343-7340 energy burden for these ratepayers but would also help to achieve Avista's decarbonization targets by reducing gas consumption.

To be successful, Avista must run AOLIEE as a larger-scale program with measurable goals, instead of weatherizing homes only when community action clients happen to be Avista customers. Detailed rules should be replaced with simple performance metrics.

**Q.** Does this conclude your testimony?

A. Yes.

1

2

3

4

5

6

7

8

### WITNESS QUALIFICATION STATEMENT

NAME:	Benedikt Springer
<b>EMPLOYER:</b>	Community Action Partnership of Oregon (CAPO)
TITLE:	Utility Policy Analyst
ADDRESS:	2475 Center Street NE, Salem OR 97301
EDUCATION:	PhD, Political Science University of Oregon

**EXPERIENCE:** As a utility policy analyst at CAPO, my job is to advocate for low-income interests in utility regulation and improve the energy assistance and weatherization programs our network administers. Our goal is that everyone can meet their basic needs, like accessing electricity, without financial stress.

Previously, I worked as a policy analyst at the Morrison Institute for Public Policy at Arizona State University. In that position, I co-led major policy research projects on housing affordability, housing for people with serious mental illness, and homelessness. I have also done policy analysis for the Bureau of Labor and Industries (BOLI), advising the labor commissioner and its (wage and hour, antidiscrimination) law enforcement divisions. As a PhD student and after, I have taught political science classes at the University of Oregon, Portland Community College, and Mount Hood Community College.

CAPO is a 501(c)(3) non-profit formed by the 17 Oregon community action agencies and a special purpose organization, the Oregon Human Development Corporation. Our organizations plan, implement, and deliver anti-poverty programs across all of Oregon's 36 counties, including homeless shelters, food banks, and Head Start. Our network is also responsible for implementing state- and federally-funded weatherization programs (e.g. ECHO, WAP) as well as energy assistance programs (e.g. LIHEAP, OEAP). We also implement assistance programs for Avista. Five member organizations have clients that are served by Avista: Community Connection of NE Oregon in Union County, Klamath and Lake County Community Action Services in Klamath County, the Oregon Human Development Corporation in Klamath County, ACCESS in Jackson County, and United Community Action Network in Josephine and Douglas County. As an association, our mission is to magnify the anti-poverty efforts of our network through advocacy in legislative and regulatory proceedings. Nation-wide, there are over 1000 community action agencies. What unites them is combining direct service delivery with efforts to address the root causes of poverty.

Since I started working for CAPO in April 2022, I have been involved with three major dockets at the OPUC. In collaboration with a coalition of Environmental Justice Advocates, I contributed to the rulemaking in AR 653. In the wake of the COVID pandemic and the passage of HB 2475, AR 653 was a docket to revise Oregon administrative rules contained under 860-021 with the intent of making them more protective for low-income customers. Among other things, I

provided research and testimony that led to a disconnection moratorium when temperatures fall below 32 degrees F and the abolition of customer deposits for those with low incomes.

I was also heavily involved in UM 2211 and adjacent activities surrounding the establishment of low-income bill discount programs at all investor-owned utilities in Oregon. My analysis and testimony were integral to showing that discounts not exceeding 25% are insufficient for those with very low incomes. As a result, NW Natural and Pacific Power agreed to adopt an additional discount tier of 40%.

Currently, I am also intervening in PGE's pending rate case on behalf of CAPO, (UE 416). My opening testimony there raises similar Energy Justice issues, arguing that the public interest demands stronger consideration of questions regarding distributive and procedural justice. In all three cases, CAPO received intervenor funding from the OPUC.

I interact regularly with Oregon's investor-owned utilities, including Avista, outside of OPUC proceedings. Since community action agencies administer energy assistance and weatherization programs for these utilities, I attend coordination meetings to represent our interests and advocate for program improvements.

Attached hereto as Exhibit Environmental Intervenors/402 is a copy of my resume.

### **Benedikt Springer, Ph.D.**

**Policy Analyst, Researcher, Project Manager** 

Multi-lingual social scientist and policy analyst with many years of experience in conducting research and teaching at the university level. Expertise in policy (esp. economic and social policy in US and EU), legal, and regulatory questions; gualitative research, statistical analysis, program evaluation, communicating technical information to diverse audiences, as well as supervising, coordinating, and collaborating with various employees, stakeholders, and agencies.

#### **PROFESSIONAL EXPERIENCE**

#### **Contributing Researcher**

ARENA Centre for European Studies (part-time) University of Oslo

Collaborator on grant-funded project that extends my dissertation research. Conducting interviews with construction firms.

#### **Utility Policy Analyst**

#### 2022-Present

2023-Present

**Community Action Partnership of Oregon** 

- Coordinating program evaluations and improvements of low-income energy assistance and weatherization programs for network of 18 community action agencies across all Oregon counties.
- Advocacy in state regulatory proceedings, i. e. rulemaking and task forces related to utility affordability, energy efficiency, and climate change.
- Advocacy for utility affordability at the Public Utility Commission and the Oregon State Legislature.

#### **Postdoctoral Research Scholar**

#### 2019-2022

2018-2019

2018-2019

2018-2019

Watts College of Public Service and Community Solutions Associate @ Morrison Institute for Public Policy Arizona State University (Tempe, AZ)

- Contributing researcher to book, 'Interest Group Capitalism,' an examination of the socio-political causes of declining US productivity, innovativeness, and increasing inequality.
- Contributing researcher and author at Morrison Institute: One Square Mile Community Development Initiative, Arizona Housing Affordability Report, Homelessness and Mental Health, Non-partisan Election Information, and various smaller projects.

#### **Independent Policy Consultant**

- Worked as independent contractor for EcoNW, Program and Policy Insight, Parsons Consulting,
- Completed Projects: Workforce Assessment for Travel Oregon; Human Service Planning for Teton County.

#### **Adjunct Instructor**

Mount Hood Community College (Gresham, OR) Portland Community College (Portland, OR)

Developed curriculum and taught: Introduction to Political Science, US Government/US Politics.

#### **Policy Analyst / Hatfield Fellow**

Oregon Bureau of Labor and Industries (Portland, OR) Portland State University

Performed policy, legislative, and legal research to assist the Labor

Commissioner.

- Assisted with rulemaking for wage and hour law.
- Managed Whistleblower Pilot Project implementation.
- Developed strategic plan for proactive wage and hour enforcement.
- Produced multimedia communication tools for stakeholders and served as a media liaison.

#### Teaching Fellow / Instructor / Researcher 2012-2018

University of Oregon, Department of Political Science (Eugene, OR)

- Developed and taught classes on political ideologies, political parties, and elections.
- Assisted with teaching and discussion for 17 classes spanning US politics, international relations, comparative politics, and political theory.
- Managed and conducted three-year dissertation research project on American and European political economy.
- Co-authored various research projects, including: statistical support and research for textbook "Reclaiming Politics" with Dr. Craig Parsons; created database of femicide laws with Dr. Erin Beck; research on international environmental treaties with Dr. Ron Mitchell.
- 2017: served as a paid academic adviser for first-year students.

#### Participant in Interuniversity Consortium for **Political and Social Research** 2015 University of Michigan (Ann Arbor, MI)

Received a grant to take classes including Math for Social Scientists, Problems in Regression Analysis III, Time Series Analysis, Programming in R.

### Legislative Aide / Intern

US Senator Jeff Merkley (Washington, DC)

#### 2009-2011

2013

2018

**Research Assistant** University of Tübingen, Department of Political Science (Germany)

#### EDUCATION

### Ph.D. Political Science

University of Oregon | GPA 4.0

Dissertation: "Building Markets? Neoliberalism, Competitive Federalism, and the Enduring Fragmentation of the American Market."

Page 1 | Benedikt Springer

### Environmental Intervenors/402 Springer/2

• Examination fields: Comparative Politics and International Relations.

#### **M.Sc. Political Science**

University of Oregon | GPA 4.0

 Thesis: "The Affinities of Higher Education and Welfare State Regimes."

### **B.S. Economics and Political Science**

University of Tübingen, Germany | GPA 3.8

 Thesis: "Government Responses to the 2008 Financial Crisis: Comparative Analysis from a 'Varieties of Capitalism' Perspective."

### PROFESSIONAL SKILLS\_

- Advanced knowledge of US and European Union economic policy, social policy, and governance structures.
- Doctorate-level statistical data analysis and advanced experience with a variety of qualitative methods
- Literature review and analysis in a variety of fields; developing policy recommendations.
- Project management, particularly for research projects.
- Communicating technical information to technical and non-technical audiences.
- Management of diverse stakeholders and audiences; navigation of complex hierarchies.
- Detailed working knowledge of legislative procedures and government bureaucracy.
- Computer skills: Microsoft Office Products, STATA, R, SQL
- Languages: German (native), English (fluent), French (written).

#### ACTIVITES AND INTERESTS\_

#### Mountain Rescue Volunteer

#### 2013-Present

Eugene & Portland Mountain Rescue (Oregon)

• Experience in leading strike teams as well as incident management; Frequent participant in mountain as well as rugged terrain search & rescue missions in Oregon.

### Graduate Student Council2014-2018University of Oregon, Department of Political Science (Eugene, OR)

Department Steward	2015-2017
Graduate Student Fellowship Federation (Eugene, OR)	

### **RESEARCH AND PUBLICATIONS\_**

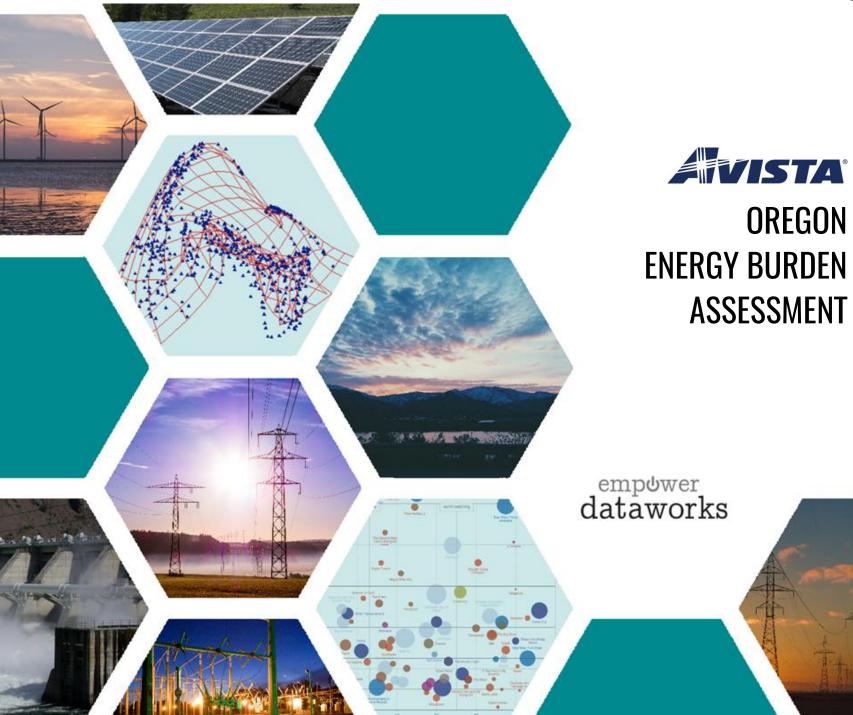
- "Examining the Ease of Voting in Arizona," 2022, Morrison Institute for Public Policy. <u>https://tinyurl.com/2krvmqwg</u>.
- "Mental Health, Substance Use, and Homelessness. Background Report," with Kristi Eustice, 2022, Arizona Townhall. <u>https://tinyurl.com/mrheacf9</u>.
- "When Think Tanks Refuse Thinking: Why American Pro-Market Conservatives Oppose Market Integration," 2021, *Studies in American Political Development*, 1-14. doi:10.1017/S0898588X21000092.
- "Housing is Health Care. The Impact of Supportive Housing on the Costs of Chronic Mental Illness," with Julia Bausch and Alison Cook-Davis, 2021, Morrison Institute for Public Policy. <u>https://tinyurl.com/yjdellvj</u>.
- "Building Arizona. Constructing a Rental Market that Meets Demand and Serves All Arizonans", with Alison Cook-Davis et al., 2021, Morrison Institute for Public Policy. <u>https://tinvurl.com/ygnz875y</u>.
- "Understanding the Propositions", 2020, Morrison Institute for Public Policy. <u>https://tinyurl.com/yywfaav5</u>.

- "One Crisis Away: Rethinking Housing Stability for Arizonans on the Margin", with David Schlinkert et al., 2020. Morrison Institute for Public Policy. <u>https://tinyurl.com/y3yntqly</u>.
- "On the Transformative Power of Public Goods Thinking", 2020. Medium. <u>https://tinyurl.com/y6pey88a</u>.
- "Just How Wrong is the Brexiteer View of an Anti-Market EU? Ask Canada or Australia", with Craig Parsons, 2018. London School of Economics. Brexit Blog. <u>https://tinvurl.com/y7sp4mgl</u>.
  - "European and American Interstate Barriers and Varieties of Neoliberalism", with Leif Hoffman and Craig Parsons. Paper Presented at: American Political Science Association Annual Meeting, Boston, MA, August 30 -September 1, 2018.
  - "Europe's Liberal Centralism, America's Illiberal Localism", with Leif Hoffman and Craig Parsons. Paper Presented at: Conference of the Council for European Studies, Philadelphia, PA, April 14-17, 2016.
  - "Comparing the Creation of Single Markets in Federations. How Neoliberalism in the US Undermines the Creation of Competitive Markets against its own Goals", Paper presented at: 57th Annual Convention of the International Studies Associations, Atlanta, GA, March 16-19, 2016.
  - "Preconditions for Trade Liberalization? How (US) Federalism Inhibits Progress Toward Liberalization of Government Procurement", Paper presented at: 56th Annual Convention of the International Studies Associations, New Orleans, LA, February 18-21, 2015.
  - "The Affinity and Interaction of Higher Education and Welfare State Regimes: The Cases of Germany and the US", Paper presented at: Annual Meeting of the Pacific North West Political Science Association, Bend, OR October 9-11, 2014.
  - "Divergence in Higher Education Systems The Political Economy of Learning; Germany, Sweden, and United States of America", Paper presented at: Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2014.
  - "Divergence in Higher Education Systems The Political Economy of Learning; Germany, Sweden, and United States of America", Paper presented at: Graduate Student Research Forum of the University of Oregon, March 7, 2014.
  - "Die Protestbewegung gegen Stuttgart 21 : Eine qualitative Analyse der Mobilisierungsmechanismen und Framingstrukturen" [Case Study of a Protest Movement - A Qualitative Evaluation of Successful Mobilization], with Sophia Dittes and Carla Schweigert, 2011, University of Tübingen, <u>http://hdl.handle.net/10900/47876.</u>

2010

2015

Environmental Intervenors/403 Springer/1



### AVISTA OREGON ENERGY BURDEN ASSESSMENT

JUNE 2022

### **PREPARED FOR**

Lisa McGarity and Ana Mathews

Avista



**PREPARED BY** 

Hassan Shaban, Ph.D.

Empower Dataworks

empower dataworks

# INTRODUCTION

This brief report presents the methodology and findings from Avista's 2022 Oregon energy burden assessment. The results of the assessment are contained in the web dashboard at https://avista-or.empowerdataworks.com.

# CONTENTS

INTRODUCTION	
CONTENTS	
1. METHODOLOGY	4
1.1 GENERAL APPROACH	
1.2 DATA SOURCES	6
1.3 FINAL ATTRIBUTES AND METRICS	8
1.4 SOURCES OF UNCERTAINTY	13
2. AVISTA'S ENERGY BURDEN BASELINE	14
2.1 AVISTA'S OREGON RESIDENTIAL SECTOR PROFILE	15
2.2 ENERGY BURDEN	16
2.3 CONSERVATION VS DIRECT ASSISTANCE	19
3. KEY CUSTOMER SEGMENTS	2(
3.1 OVERVIEW	2

3.2 EASTERN COUNTIES2	2
3.3 DOWNTOWN KLAMATH FALLS2	4
3.4 ALTAMONT	5
3.5 OLD MEDFORD2	6
3.6 NORTHEAST LA GRANDE2	27
3.7 SOUTH GRANTS PASS2	8
3.8 MOBILE HOME RENTERS2	9

Environmental Intervenors/403 Springer/4

# 1. METHODOLOGY

## **1.1 GENERAL APPROACH**

This energy burden assessment relies on collecting customer-level data, modeling missing attributes, then aggregating key metrics by geographic, demographic or building variables for analysis. The customer data comes from various sources as described in the rest of Section 1. Some demographic attributes were modeled or inferred using statistical techniques due to lack of primary data in the Customer Information System (CIS) or other sources. American Community Survey data was mainly used to sanity check aggregate statistics of customer-level data at the census tract level.

Three types of metrics were calculated:

- Metrics related to energy burden based on demographic and geographic characteristics
- Participation and funding in Energy Assistance Programs
- Customer energy use characteristics

The final dataset and results were packaged in a web dashboard for Avista staff.

# **1.2 DATA SOURCES**

The data sources leveraged for the analysis are described in this section.

### DATA PROVIDED BY AVISTA

**Customer Information System (CIS):** This data included monthly electricity bills for 36 months in 2019-21, account numbers and service addresses. A separate data extract included the dates and customer accounts that received late payment notices, allowing us to calculate the on-time payment rate for different customer segments.

**Direct Assistance Program Data:** We received a list of participating accounts in LIHEAP and the Low Income Rate Assistance Program (LIRAP) program in 2019-21, along with discount amounts and dates. This allowed us to calculate the total assistance funding at the household level.

**Energy Efficiency Program Data:** We received a list of participating accounts in the low income weatherization program in 2019-21, along with installed measures,

estimated therm savings and funding. The deemed therm savings were used to estimate the annual bill impact based on average bill savings of \$0.98/therm.

**Agency Profiles:** Avista provided demographic and program participation profiles for the four community action agencies in its service territory.

### DATA OBTAINED FROM OTHER SOURCES

**Geocoding:** All customer addresses were geocoded to a latitude/longitude pair to facilitate geographic analysis. In addition, we mapped the latitude/longitude pairs to census tracts, block groups and blocks in order to pull additional aggregate statistics.

**County Assessor Data:** We obtained publicly available assessor data from Douglas, Jackson, Josephine, Klamath and Union counties. The assessor data included appraised values for homes, square footage, building year built, building use codes (residential, mobile homes, commercial and industrial), number of buildings on a land parcel, and other minor data points that were useful for performing general QA.

The addresses in this dataset were standardized to US Postal Service format, then matched with addresses in the CIS data. Some addresses existed in the CIS data but not in the assessor data (typically happens when multiple buildings occupy the same land parcel).

**Customer Demographics:** Data was purchased from a third-party data compiler that aggregates data from

public sources and credit bureaus. This data was mapped to the CIS dataset using customer addresses and included total household income, age of occupants, and homeownership status for a little over 77% of residential households. Demographic attributes for some customers were modeled due to lack of primary data in CIS or other sources. The modeling approaches are described in the next section.

**American Community Survey (ACS):** ACS data (2019 5 year estimates) was primarily used for QA to ensure that aggregate counts for various demographic attributes match the expected distributions from ACS.

### **1.3 FINAL ATTRIBUTES AND METRICS**

The calculation methods for the metrics and attributes used in this report are described in this section. For all attributes, we also captured metadata related to the source of data and the confidence in the value (for example, data from primary sources has a high confidence, while modeled data has lower confidence). All of the data is robust for aggregate analysis, while high confidence data is better suited to customer-level marketing and program targeting.

**Household Income:** Income data was only available for 77% of households in Avista's Oregon service territory. To estimate the incomes for the remaining 23%, we used an iterative procedure.

Starting from the households for which we had income data, we applied an imputation model – this is a statistical method for filling in missing data by using the home's location, home value and building type. In other words, each household is assigned an income range based on the incomes of similar households in their area. This is the initial guess for that household's total annual income. Then, an iterative calibration procedure uses those initial guesses and adjusts them to ensure that the overall income distribution within a census tract is similar to the overall income distribution from the ACS. The calibration iteratively takes a small sample of households (under 10%) and bumps them up or down by one income level within certain bounds until the modeled income distribution resembles the ACS income distribution.

Validation: From prior validation analysis, this modeling procedure yields fairly good results - it is able to reproduce the incomes accurately for a hold-out set of data from the original dataset, with errors under \$5k/year in household income for 85% of the test set and errors under \$20k/year in household income for the other 15%. Larger errors tend to happen for households with a larger income, which are not the focus of this study anyway. More importantly, the aggregate metrics related to energy burden (e.g. energy assistance need and overall burden) are very robust to errors in individual results because we are ensuring that overall distribution of income is as accurate as possible, while the energy use does not change dramatically among similar households.

**Poverty Status:** The number of people living in a household cannot be easily obtained from any public data sources. This makes it difficult to identify a household's poverty status compared to the Federal Poverty Limit or the Area Median Income, both of which are defined by household size. The median household size in the five Avista counties in Oregon varies from 2.3 to 2.4 and household size for income thresholds is a configurable parameter in the data dashboard (for sensitivity analysis).

**Building type:** Meters were classified into one of five building types: single family, mobile homes, multifamily apartments, commercial or master metered and unoccupied. Commercial meters were those tagged with a specific commercial use by the county assessor or that were on a commercial rate class (unless they were clearly apartments). Additionally, we filtered out meters using in excess of 2,000 therms/year as those are likely associated with commercial uses or are master metered. Meters that showed energy consumption less than 20 therms/year were flagged as potentially unoccupied. Overall, the number of household meters excluding commercial and unoccupied meters was approximately 94,000. Addresses with multiple units or tagged as multifamily properties by the county assessor were flagged as apartments. Mobile homes were either labelled as such by the county assessor or were sited in a mobile home park. Non-multifamily homes with addresses but without an identified land parcel are usually accessory dwelling units, trailers or mobile homes – these were all included in the "mobile home/other" category.

Validation: The aggregate housing type counts (91% single family, 6% multifamily and 3% mobile/ ADU homes) are similar to data from the DOE's LEAD tool for gas-heated homes in the five Avista counties (87% single family, 8% multifamily and 5% mobile/manufactured/ADU homes), although the LEAD tool only accounts for 67,000 gas-heated households, greatly underestimating the 94,000 actual residential customers in Avista's CIS system.

Homeownership Status: Homeownership status (rent vs. own) was determined using two methods. The demographic dataset included homeownership for approximately 77% of customers. For the other 23%, households in multifamily apartments were tagged as "Likely Renters", and households without any account changes during the two year analysis period were tagged as "Likely Homeowners". Households with an account change and an accompanying sales record were also tagged as "Likely Homeowners". This approach can potentially undercount long-term renters and tag them as homeowners. However, the accuracy of the approach seems sufficient for the purposes of large-scale aggregate analysis as in this study.

*Validation:* The owner-occupied housing rate for gasheated homes in the DOE LEAD tool is approximately 71% in the five Avista counties. The homeownership rate from this analysis is up to 80% (56% confirmed and up to an additional 24% of either homeowners or long-term renters), so the two estimates fall within each other's margin of error.

### Gas Burden and Energy Efficiency Potential thresholds: These thresholds were set as follows:

• High-burden threshold: Greater than 3%<sup>1</sup>

• High efficiency potential threshold: Greater than 0.4 therms/sq.ft/yr.

**Gas Burden:** Gas burden for a household is calculated simply by dividing annual gas expenses by gross household income.

 $Gas \ Energy \ Burden = \frac{Annual \ Gas \ Expenses}{Annual \ Household \ Income}$ 

**Excess Burden:** Excess burden is the portion of a household's energy burden in excess of the 3% threshold.

### Excess Burden

= max(0, Gas Energy Burden - High Burden Threshold) × Annual Household Income

**On-Time Payment Rate:** This is the proportion of all energy bills that did not require a late payment or disconnect notice to be sent out.

**Energy Assistance Funding:** The dollar amount of funding flowing through energy assistance programs (including discount, donation and weatherization programs) through discounts or rebates.

**Customer Bill Reductions (Avoided Burden):** The total bill impact from energy assistance programs. This is the same as the assistance funding for direct assistance programs and is based on measure savings for energy efficiency programs as described in Section 1.2.

<sup>1</sup> The state of New Jersey uses a split high burden threshold by fuel: for customers with natural gas and electric service from different utilities, no more than 3% of income should be devoted to each. We use this as a highburden guideline for gas heated homes in this assessment, recognizing that there could be different interpretations or methods for designating customers as "high-burden". The dashboard allows for adjusting the gas burden thresholds, in order to test different reasonable thresholds. **Avoided Need:** The total bill impact specifically for customers flagged as "high-burden".

**Census Tract Statistics:** Since each customer has been mapped to a census tract and block group, we are also able to match customers to census tract average statistics (e.g. highly impacted communities, presence of children, non-English speakers, education level, environmental pollution etc.).

**Energy Assistance Need:** This is the sum of excess burden across all customers.

**DOE Disadvantaged Community Score:** The number of community vulnerability criteria (social, health and environmental) that are exceeded in a census tract. This data comes from the Department of Energy's Climate and Environmental Justice Screening Tool.

# **1.4 SOURCES OF UNCERTAINTY**

- Household income is a dynamic piece of data as residents move in and out of homes and income data can become outdated within a year or two.

- **Poverty status.** Since household size cannot be reliably captured through any available data source, household poverty status is subject to uncertainty. The Federal Poverty Limit and Area Median Income both use household size as a scaling factor. So, for any analysis, it is recommended to perform a sensitivity analysis with the household size assumption (this is facilitated through the web dashboard). In general, using 2 and 3 person household assumptions has been found comparable to statistics from income-verified programs.

- Individual vs. aggregate data usage. The underlying dataset has customer-level flags for data quality – data from primary sources is considered high quality while modeled data is considered medium or low quality, depending on the availability of supporting sources of information (example, home values and location). Higher quality data can be used for individual program targeting, lower quality data can be used for program design and aggregate reporting.

Building types. There is some uncertainty in the classification of building types as described in Section
1.3. This could results in misclassifying non-residential meters as occupied households or vice versa.

- Achievable reductions in energy assistance need. This analysis presents a *technical* energy assistance need based on energy burden. However, in our experience due to a variety of barriers like access to information, application process difficulties, stigma and lack of trust, many customers may not be willing to participate in programs, regardless of program design or available benefits. Understanding the *economically achievable* reduction in energy assistance need through utility programs would require a qualitative research of non-participants in a utility's service area.

# 2. AVISTA'S ENERGY BURDEN BASELINE

الله 🖛 👘 الله آلي آللي آلي الله آلي آلي آلي آلي آلي

# 2.1 AVISTA'S OREGON RESIDENTIAL SECTOR PROFILE

Avista's service territory in Oregon state was composed of approximately **94,000 occupied households** (with a detectable energy use and not designated as shops, garages or commercial properties).

**Ethnicity:** According to the U.S. Census Bureau, approximately 83% of residents in Avista's service area are non-Hispanic white. Hispanic residents comprise 11% of the population, mostly concentrated in Klamath county.

Household Income: The median household income for residents in Avista's service area is approximately \$52,000, well below the state average of \$66,000. Approximately 14% of all households would fall under 100% of the federal poverty limit.

**Energy Bills:** Avista residential natural gas rates are about average for the region. Annual energy bills in 2019-21 averaged **approximately \$670/year with an average annual consumption of 550 therms**. Figure 1 shows the distribution of annual natural gas bills; with about half of households paying more than \$640/year on their bills. Customers on the east side of the Cascades (Klamath and Union counties) generally have higher bills (\$740 on average) compared to the west side (\$650 on average).

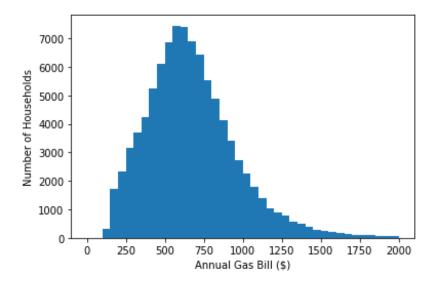
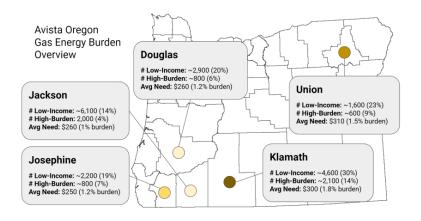


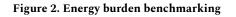
Figure 1. Household natural gas bill distribution for Avista's Oregon residential customers

### 2.2 ENERGY BURDEN

Avista customers have an **average and median gas** energy burden of 1.2% and 0.7%, respectively. Figure 2 shows various gas energy burden metrics in the five Avista counties. The proportion of customers who have a high energy burden is relatively low in the Western counties (4-7% of customers) vs. the Eastern counties (9-14% of customers).

The average household paid \$670/year in natural gas bills in 2019-21. Of 94,000 identified households, **6,400 were deemed to have a high energy burden**, meaning that annual natural gas bills exceeded 3% of their income. These high-burden customers paid an average of \$740 in annual natural gas bills; the higher bill average reflects their higher likelihood to live in less efficient or older homes. The **total energy assistance need for Avista's Oregon customers is approximately \$1.8M**—the total reduction that would bring all customer natural gas bills below the 3% high burden threshold.





Although averages and medians give a general indication of energy burden across a service territory, the reality is that **energy burden is a customer-level metric** and its distribution is a better indicator of the burden that customers experience. The distribution of energy burden among Avista customers is shown in Figure 3.

The goal of an effective energy assistance portfolio should be to prioritize the customers who most need the assistance, i.e. the customers to the right of the 3% threshold.

Approximately 67% of the energy assistance need is borne by single family households, with 16% in mobile homes and the remainder in multifamily homes. The highest concentration of need is in mobile homes, requiring more than \$316/household in assistance on average, compared to \$283/household for single family and \$234/household multifamily households.

Approximately 48% of the energy assistance need for Avista customers is among renters, indicating that conservation programs targeted at high-burden customers will need to grapple with the split incentive problem between landlords and tenants, but energy burden among homeowners is equally significant. Other customer segments can be investigated in more detail in the data dashboard.

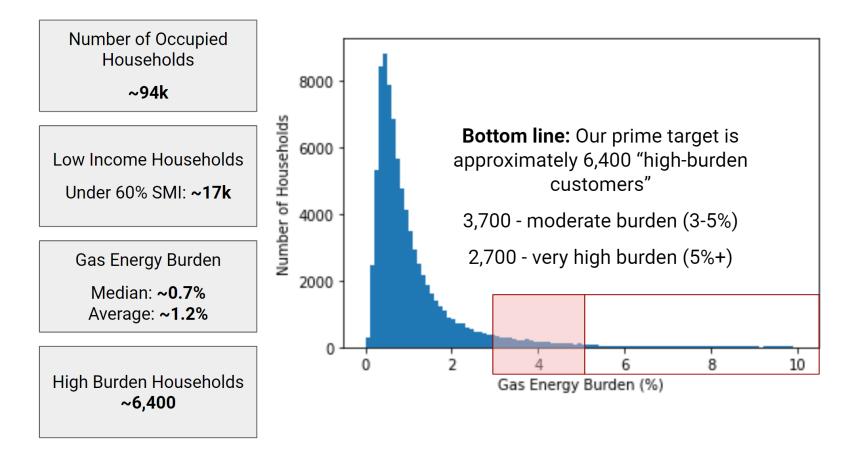


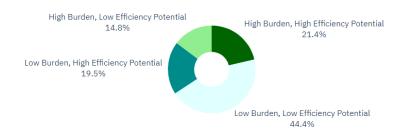
Figure 3. Distribution of energy burden among Avista's Oregon customers.

# 2.3 CONSERVATION VS DIRECT ASSISTANCE

Figure 4 shows the distribution of energy burden and energy efficiency potential (defined through Energy Use Intensity thresholds) across all low-income residential customers. In a perfect world, the energy assistance portfolio would match these customer segments. For example:

- Conservation programs should primarily serve high burden, high potential households
- Direct assistance programs should primarily serve high burden, low potential households
- Crisis/emergency programs should primarily serve **low burden**, **low potential** households
- Traditional conservation programs with financing should serve **low burden**, **high potential** households

Aligning targeted customers with program strengths results are the most cost-effective pathway to energy burden reduction.



### Figure 4. Avista's Oregon low-income customer segments by energy burden and energy efficiency potential.

Approximately 44% of Avista's low-income customers are low-burden and low-efficiency potential. These customers' energy bills may not be a huge expense relative to housing, medical and education expenses, and they should not be prioritized in the more intensive programs, such as weatherization.

21% of high burden customers also have a high efficiency potential indicating that the energy assistance program mix should equally prioritize sustained energy burden reductions through energy efficiency and weatherization.

Environmental Intervenors/403 Springer/20

# **3. KEY CUSTOMER SEGMENTS**

A12

A11

HOUSE

# **3.1 OVERVIEW**

This section presents statistics and profiles related to key customer segments in Avista's Oregon service area. These customer segments were selected for a combination of reasons:

1. Flagged in this assessment as having high overall burden or high prevalence of energy burden

2. Meets the Department of Energy criteria for vulnerable communities

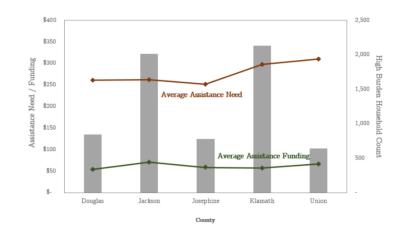
3. Identified as high priority through interviews with agencies

This analysis is primarily geographic, focusing on specific neighborhoods. The maps in the following sections display the level of energy assistance need in these areas as well as locations of social services for potential outreach.

These customer segments represent a big portion, but not the entirety of the high energy burden among Avista's customers, so they should be targeted for any new programs or initiatives in the future using lists of customers who live in the block groups identified below.

# **3.2 EASTERN COUNTIES**

**PROFILE**: The figure below shows the energy assistance need and average energy assistance funding in the five counties in Avista's Oregon service area. In general, the energy assistance need is about 30% higher in Klamath and Union counties, east of the Cascades, while the average level of funding is almost equal in all counties. The difference in average need can mostly be explained by the difference in climate. Figure 5 shoes the seasonal average temperatures in Medford and Klamath Falls (which are only 80 miles apart) – areas east of the Cascades experience colder temperatures in winter and the shoulder seasons, resulting in higher gas bills and burden.



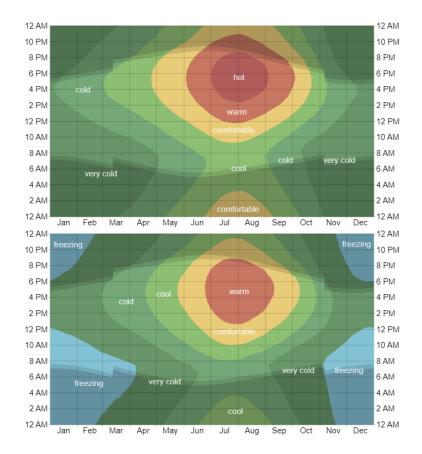


Figure 5. Seasonal average temperatures in Medford (top) and Klamath Falls (bottom) – from <u>WeatherSpark.com</u>.

**RECOMMENDATIONS**: We recommend adding the level of gas assistance need or gas burden as an additional consideration when apportioning program budgets among Avista's partner agencies. Relying on customer counts alone misses the fact that gas energy burden is not evenly distributed among the different counties. This would roughly imply a budget breakdown as follows: a third in Jackson county, a third in Klamath county and the remaining third split evenly between Douglas, Josephine and Union counties. The following table shows that three quarters of Avista's customers are located west of the cascades, but they only shoulder about half of the gas burden.

County	Proportion of gas assistance	Proportion of current program	Proportion of Avista
	need	spending	customers
Douglas	12%	11%	16%
Jackson	30%	43%	48%
Josephine	11%	9%	12%
Klamath	36%	28%	17%
Union	11%	9%	7%

### **3.3 DOWNTOWN KLAMATH FALLS**

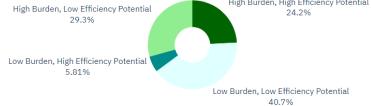
Census block groups: **410359718001**, **410359718002**, **410359718003**, **410359719005** 

Total Assistance Need: **\$68k** (**4% of total**) Total Assistance Funding: **\$18k** (**2% of total**) DOE Disadvantaged Community Score: **2.6** 

**PROFILE**: Customers in downtown Klamath Falls tend to live in older single family homes – about a third of these customers rent their homes. Although 20% of the local population are considered people of color (Hispanic), most customers are bilingual. The area has some light industrial activity and has historically had relatively high rates of unemployment and poverty.

**RECOMMENDATIONS**: This customer segment is urban but dispersed. KLCAS has primarily relied on word of mouth to recruit program participants. There are numerous social services organizations in the area, which introduces an opportunity to build partnerships with local community organizations.





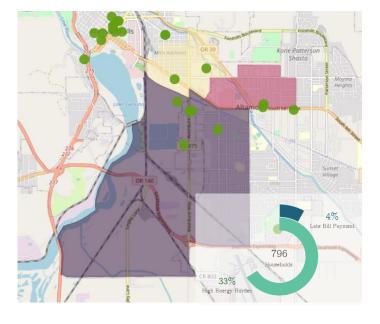
### **3.4 ALTAMONT**

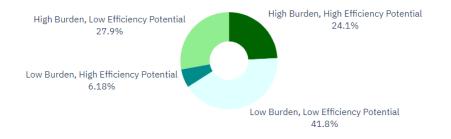
### Census block groups: 410359712001, 410359715002, 410359716003

Total Assistance Need: **\$88k** (**5% of total**) Total Assistance Funding: **\$40k** (**3% of total**) DOE Disadvantaged Community Score: **4.7** 

**PROFILE**: Altamont is an unincorporated community just south of Klamath Falls. Most homes in the area are smaller, older, stick-built on concrete slabs – more than 90% of homes were built prior to 1980. Almost a third of customers in the area have a gas energy burden higher than 3%, but on-time bill payment rates are still reasonably high. There is a large proportion of senior customers in the area. The area appears to be slightly underserved by existing programs, but the local agency is moving to a new location in summer 2022, which should be more accessible by public transit.

**RECOMMENDATIONS**: This customer segment is more dispersed than Klamath Falls and physical access to services may be harder. Consider targeted mail campaigns to the area informing customers of programs. KLCAS is introducing a new online application system that could improve program access for these customers.





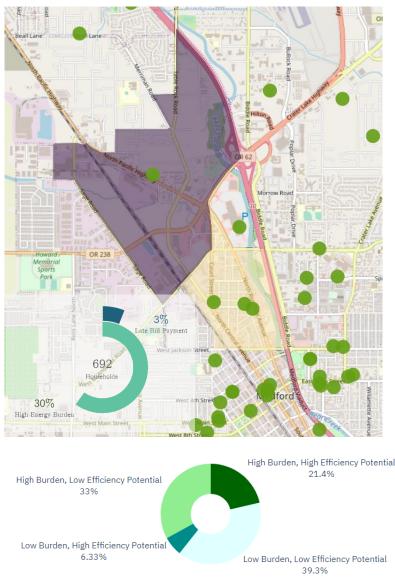
### 3.5 OLD MEDFORD

Census block groups: 410290003002, 410290001001

Total Assistance Need: **\$66k** (**4% of total**) Total Assistance Funding: **\$18k** (**1% of total**) DOE Disadvantaged Community Score: **2.6** 

**PROFILE**: The area surrounding Northwest Medford is an older part of town and includes several gas-heated mobile home parks that were flagged as having a high gas energy burden. The area has a high rate of property crime and appears to be somewhat underserved by existing programs.

**RECOMMENDATIONS**: Outreach to trailer park managers can be very effective at recruiting program participants who reside in mobile homes. The area should be prioritized for weatherization or lighter touch energy efficiency (e.g. energy savings kits, thermostats and air sealing), as more than half of customers have a high gas savings potential.



### **3.6 NORTHEAST LA GRANDE**

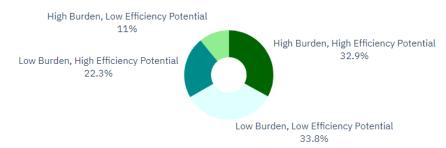
Census block groups: **410619704002**, **410619704003**, **410619705002**, **410619707001**, **410619707003**, **410619708001**, **410619708002** 

Total Assistance Need: **\$82k** (**5% of total**) Total Assistance Funding: **\$37k** (**3% of total**) DOE Disadvantaged Community Score: **0** 

**PROFILE**: The high priority areas in La Grande have predominantly older housing and a relatively large senior/fixed income population. Northeast La Grande is surrounded by agricultural land.

**RECOMMENDATIONS**: As rural areas, traditional mass communications may not be effective at reaching this customer segment. Collaborating with local schools, churches or community organizations (like Union County Casa) will be more effective. Door-to-door canvassing may also be feasible in collaboration with the local agency.





### **3.7 SOUTH GRANTS PASS**

Census block groups: 410333612001

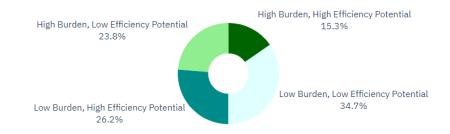
Total Assistance Need: **\$22k** (**1.2% of total**) Total Assistance Funding: **\$5k** (**0.4% of total**) DOE Disadvantaged Community Score: **1** 

**PROFILE**: The area south of Grants Pass has various neighborhoods composed of mobile homes and ADUs. Some of these were affected by wildfires in the past few years.

Old Town Roseburg (410191300001) is also an area of older manufactured homes, with a high level of homelessness due to the availability of social services.

**RECOMMENDATIONS**: UCANCAP already has a satellite office in Grants Pass that accepts and processes program applicants. Targeted marketing campaigns to these block groups as well as trust building through local partnerships will be essential to reach this customer segment.

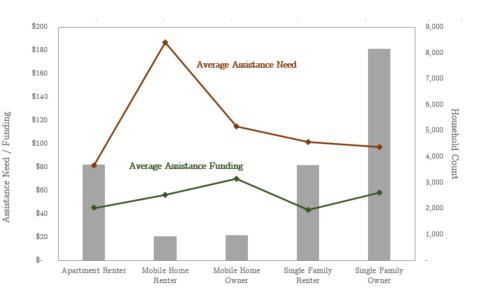




### **3.8 MOBILE HOME RENTERS**

**PROFILE**: The figure to the right shows the energy assistance need and average energy assistance funding for all low-income customers in Avista's Oregon service area, categorized by housing type and homeownership. In general, it appears that apartment dwellers are relatively well-served by existing programs as the gap between average need and average funding is very small. On the other hand, the least well-served segment appears to be renters living in mobile homes.

**RECOMMENDATIONS**: Mobile home dwellers can be best reached through outreach to trailer park managers. In addition to building partnerships with local schools, churches and community organizations, it is recommended to develop targeted energy assistance marketing campaigns (direct mail and email) for these customers through the dataset developed in this assessment. Onerous program application requirements are also a big barrier to participation for this customer segment.



empower dataworks www.empowerdataworks.com

### **Benedikt Springer**

From:	Christina Zamora <christinaz@klcas.org></christinaz@klcas.org>
Sent:	Monday, July 3, 2023 8:08 AM
То:	Benedikt Springer
Cc:	Xitlali Torres
Subject:	FW: [External] Energy resources Guide Book Avista page draft
Attachments:	My-Energy-Rate-Application-2022 (fillable format).pdf; Avista Oregon Bill Discount Flyer 2022.pdf

### Good Morning,

Below is the email that you asked Xitlali to send you. She is out of the office so I'm sending it.

### Christina

Christina Zamora Executive Director Pronouns: She/Ella



Klamath & Lake Community Action Services

2316 South Sixth St., Suite C Klamath Falls, Oregon 97601 Phone: 541-882-3500 Cell: 541-591-4891

**ACCOMMODATION:** KLCAS is proud to be an Equal Employment Opportunity employer. We do not discriminate based upon race, religion, color, national origin, gender, sexual orientation, gender expression, age, status as a protected veteran, status as an individual with a disability or other legally protected characteristics.

If you require accommodation for impairment, disability, language barrier, etc., please contact KLCAS at 541-882-3500.

**CONFIDENTIALITY NOTICE:** This electronic mail transmission may contain legally privileged, confidential information belonging to the sender. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or taking any action based on the contents of this electronic mail is strictly prohibited. If you have received this electronic mail in error, please contact sender and delete all copies.

**POLITICAL ACTIVITY:** Klamath & Lake Community Action Services does not endorse or oppose candidates for public office. This email is not intended to encourage a vote for or against any specific measure. Klamath & Lake Community Action Services' policy is to provide information to elected officials and policymakers regarding the potential impact of their choices on communities they serve.

From: Matthews, Ana <Ana.Matthews@avistacorp.com>
Sent: Thursday, February 9, 2023 11:44 AM
To: Xitlali Torres <XitlaliT@klcas.org>; Terpko, Mikaela <Mikaela.Terpko@avistacorp.com>; Carol Weltz
<weltz@snapwa.org>
Cc: Nicole Clifton <nicolec@klcas.org>; Christina Zamora <christinaz@klcas.org>
Subject: RE: [External] Energy resources Guide Book Avista page draft

Xitlali,

Thank you for all the work you are doing to spread the word to engage folks for these important programs. I have answered your questions below in red.

Have your energy colleagues had an opportunity to see the document? It has been my experience that we avoid certain details on programs being shared externally.

When certain details are shared publicly, it shapes expectations that can be hard to manage by agencies. Over the years, we have received requests from agencies not to promote any one program because then customers show up and demand that specific program, while the agency intake person knows that other programs will better serve them, they may challenge them with belief that what they read is what they should get – it creates a contentious situation. Rather we focus on encouraging folks to contact their local agency to learn about the assistance/programs that are available to them.

Additionally, some of this information isn't helpful to most people. In promoting programs, we have found focusing on the end result (the benefit of applying - such as getting help for your bill that you are struggling to pay) is what helps to inspire folks to take action and call their local agency.

With that I suggest the following edits to the document:

### **Bill Discount**

- Remove the percentage of discount ranges; we are not promoting those publicly. Please, change the sentence to read: Discounts are specific to household situation.
- The URL to sign up for Avista's My Energy Rate is: myavista.com/MyEnergyRate please see attached flyer
- Remove wording on the hardship exception. It is the exception, not the rule and totally up to supervisor discretion.
- Change the Arrearage Management section to read: Assistance may be available for your past due balance.

### Project Share

- Description should be: Assistance for Emergency or Hardship situations.
- Please remove the benefit amount
- Please change sequence under eligibility to be: Hardship or Emergency Status such as severe change of income, past due on payment
- Folks cannot apply for Project Share through Avista, they can only apply for it at KLCAS
- It is good to promote that it Project Share is funded by donations, and folks can donate at: givetoprojectshare.org

Please let me know if you have additional questions. We truly appreciate your work to spread the word – we want you to be successful in your desire to engage folks for these programs that can help their situation significantly.

All my best, Ana~

From: Xitlali Torres <<u>XitlaliT@klcas.org</u>>

Sent: Thursday, February 9, 2023 10:40 AM

**To:** Terpko, Mikaela <<u>Mikaela.Terpko@avistacorp.com</u>>; Matthews, Ana <<u>Ana.Matthews@avistacorp.com</u>>; Carol Weltz <<u>weltz@snapwa.org</u>>

Subject: [External] Energy resources Guide Book Avista page draft

Hello,

I have attached the page I have drafted up for Avista programs. Please let me know of any feedback you may have regarding the accuracy of information, what information can be publicized, the look and feel, wording, etc.

I am still a bit confused on Project Share especially. Some other questions I still have are:

- For the bill discount, is that a year long, do they have to re-apply after an amount of time? Once enrolled, folks are in for a two year term. Attached is the application that includes the program terms.
- To be clear, since I did include comfort level billing (this page is directed only towards Avista customers), they cannot be in this program and the bill discount program at the same time, correct? Does it make sense what I put on that? Please allow for that discussion to occur at intake and do not include it in the public document.
- That's all for now, please look it over an get back to me. I want it to be as clear as it can be.

Thank you very much,

Xitlali Torres Community Resource Specialist RARE Americorps



Klamath & Lake Community Action Services 2316 South Sixth St., Suite C [Please note our physical/mailing address has changed.] Klamath Falls, Oregon 97601 Phone: 541-882-3500 Cell: 541-591-2629

**ACCOMMODATION:** KLCAS is proud to be an Equal Employment Opportunity employer. We do not discriminate based upon race, religion, color, national origin, gender, sexual orientation, gender expression, age, status as a protected veteran, status as an individual with a disability or other legally protected characteristics.

If you require accommodation for impairment, disability, language barrier, etc., please contact KLCAS at 541-882-3500.

**CONFIDENTIALITY NOTICE:** This electronic mail transmission may contain legally privileged, confidential information belonging to the sender. The information is intended only for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or taking any action based on the contents of this electronic mail is strictly prohibited. If you have received this electronic mail in error, please contact sender and delete all copies.

**POLITICAL ACTIVITY:** Klamath & Lake Community Action Services does not endorse or oppose candidates for public office. This email is not intended to encourage a vote for or against any specific measure. Klamath & Lake Community Action Services' policy is to provide information to elected officials and policymakers regarding the potential impact of their choices on communities they serve.

USE CAUTION - EXTERNAL SENDER Do not click on links or open attachments that are not familiar. For questions or concerns, please e-mail <u>phishing@avistacorp.com</u> CONFIDENTIALITY NOTICE: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or an agent of the intended recipient, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments.