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July 20, 2022

VIA ELECTRONIC FILING AND FEDEX MAIL

Public Utility Commission of Oregon
Attn: Filing Center
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Salem, Oregon 97308-1088

Re: Consolidated UG 435 / UG 411 / Application of NW Natural for a General Rate Revision/Schedule 198 Renewable Natural Gas Recovery Mechanism Surrebuttal Testimony

Northwest Natural Gas Company, dba NW Natural ("NW Natural" or the "Company"), files herewith its Surrebuttal Testimony for the above-mentioned consolidated proceedings.

Please note, this filing contains highly confidential information that represents business-sensitive, non-public information and will be provided subject to Modified Protective Order No. 21-465.

Please address correspondence on this matter to me with copies to the following:

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Enclosures

CERTIFICATE OF SERVICE
UG 435 / UG 411

I hereby certify that on July 20, 2022, I have served the unredacted, highly confidential version of NW NATURAL'S SURREBUTTAL TESTIMONY in docket UG 435 upon the Commission and Parties designated to receive highly confidential information pursuant to Modified Protective Order No. 21-465 via FedEx.

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of Kimberly A. Heiting and Ryan J. Bracken

POLICY
EXHIBIT 2400

July 20, 2022

EXHIBIT 2400 – SURREBUTTAL TESTIMONY – POLICY

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Are you the same Kimberly Heiting and Ryan Bracken who filed Reply Testimony in this proceeding on behalf of Northwest Natural Gas Company ("NW Natural" or "the Company")?

A. Yes. We presented NW Natural/1700, Heiting-Bracken.

Q. Are you jointly sponsoring this Surrebuttal Testimony?

A. Yes, except Ms. Heiting individually sponsors the testimony regarding the investment community and indoor air quality and Section II.B.5.

Q. What is the purpose of your Surrebuttal Testimony?

A. Our Surrebuttal Testimony responds to Rebuttal Testimony from the Oregon Citizens' Utility Board ("CUB") witness Bob Jenks and Coalition of Communities of Color, Sierra Club, Verde, Climate Solutions, Oregon Environmental Council, Columbia Riverkeeper, and Community Energy Project (collectively, the "Coalition") witnesses Ed Burgess, Nora Apter, and Brian Stewart regarding CUB's and the Coalition's recommendations that the Commission eliminate NW Natural's line extension allowance ("LEA") in this case. Ms. Heiting also responds to Coalition witness Greer Ryan's argument that the salary expense agreed to by parties to the First Stipulation impermissibly allows the Company to recover for its employees' time spent on activities that the Coalition deems political.

Q. Please summarize your testimony.

A. The Coalition and CUB largely reprise, clarify, and expand upon the arguments from their Opening Testimony to which we responded in our Reply Testimony. Despite raising numerous concerns regarding perceived risks of the current and future gas system, neither party has provided any persuasive evidence that such risks require elimination of NW Natural's LEA. On the contrary, the parties' proposals raise significant and unanswered factual questions as to Oregon's energy future, including the optimal path to decarbonization of the energy sector. To the extent that the Commission wishes to address recommended revisions to gas company LEAs in this context, it should do so only on a full record—which is lacking in this case—as well as with participation from all interested stakeholders, as recommended by Staff and AWEC.[1] In fact, NW Natural would support such an approach, and in particular has been evaluating the development of separate LEAs specifically applicable to dual fuel and gas heat pumps.

CUB argues that NW Natural's LEA must be eliminated over the next two years in order to mitigate the risk that stranded assets will result if a significant number of customers leave the natural gas system due to: increased costs of gas supply, installation of electric heat pumps rather than gas furnaces, and/or the Company's efforts and/or inability to decarbonize.[2] However, CUB has not provided any real data suggesting that these risks either have or are even beginning to materialize. To the contrary, NW Natural's evidence demonstrating that its customer additions have remained quite steady over the past several years is entirely unrebutted. Therefore, CUB has failed to provide support for the risks that it cites as the basis for eliminating NW Natural's LEA.

[1] Staff/1800, Muldoon/28-29; AWEC/200, Mullins/19.

[2] *See* CUB/400, Jenks/3, 8-9.

Moreover, to the extent there is a risk that some customers might depart the gas system for the reasons Mr. Jenks cites, NW Natural's analyses show that the best way to mitigate cost impacts to existing customers is to continue adding customers to the system in a fair and reasonable way. As NW Natural witness John Taylor explains in his Surrebuttal Testimony, the current LEA ensures fairness and equity between new and existing customers and is not a subsidy from existing to new customers.[3]

The Coalition echoes CUB's concern regarding stranded costs, which the Coalition claims will result from the "inevitable" electrification of NW Natural's load, but also openly advocates for eliminating the LEA in order to achieve electrification—which they believe is necessary to achieve required greenhouse gas ("GHG") reductions.[4] We reiterate our prior testimony that while additional analytical work is needed, NW Natural is confident it can meet its obligations under the Climate Protection Program ("CPP") at a reasonable cost without eliminating new customer connections. However, decisions as to Oregon's best path to decarbonization must be made by policy makers, who in turn will require Oregon-specific and industry-wide studies conducted with the full cooperation of both the gas and electric sectors. This work has yet to be performed, and for that reason, the questions and concerns raised by the Coalition are at best premature.

[3] *See* NW Natural/2600, Taylor/2-3.

[4] *See, e.g.*, Coalition/100, Apter/13; Coalition/700, Stewart/4.

The fact is, the record in this case does not support CUB's and the Coalition's claims that customers are likely to leave the gas system over the coming years or that risks of stranded costs are best addressed by reducing the LEA. On the contrary, doing so will drive customer attrition and therefore increase the system costs borne by remaining customers. Moreover, the record indicates significant questions as to whether building load can be significantly electrified without threatening resource adequacy and reliability. Neither CUB nor the Coalition has addressed how the basic regulatory principles that underlie LEA policies—balance of fairness between new and existing customers, intergenerational equity and non-discrimination—can possibly be protected if the LEA is eliminated. For all of these reasons, the LEA proposals made by CUB and the Coalition should be rejected.

Finally, Coalition witness Greer Ryan's argument that the First Stipulation impermissibly allows the Company to recover the costs of employee time spent on political activities is unfounded. The Company's discussions with cities that she highlights are crucial to NW Natural's delivery of core utility service and are not political in nature. The costs of engaging in these conversations are appropriately paid for by customers.

II. RESPONSE TO PARTIES' ARGUMENTS

A. Response to CUB.

Q. In his Rebuttal Testimony, Mr. Jenks accuses the Company of mischaracterizing his Response Testimony.[5] Before responding, can you please provide some context?

A. Yes, in our Reply Testimony, we explained that CUB advocates for elimination of the LEA by calling into question whether NW Natural can comply with the CPP and suggesting that the only way to reduce GHG emissions is to electrify building load.[6] In his Rebuttal Testimony, Mr. Jenks takes issue with the Company's criticism that he rushed to judgment and clarifies that he has not already decided that NW Natural cannot decarbonize and comply with the CPP, and that CUB does not advocate for phasing out the natural gas system.[7]

Q. Please respond.

A. We appreciate Mr. Jenks clarifying CUB's positions in his Rebuttal Testimony. In particular, we appreciate Mr. Jenks explaining that CUB has not prejudged the future of the natural gas system and whether Oregon's optimal pathway to achieving decarbonization includes a decarbonized gas system or requires building electrification.[8] And we are pleased that Mr. Jenks is keeping an open mind as to whether NW Natural can comply with the CPP. We would point out,

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[5] CUB/400, Jenks/2.

[6] NW Natural/1700, Heiting-Bracken/2.

[7] CUB/400, Jenks/2, 5, 8-9.

[8] CUB/400, Jenks/5.

however, that CUB's proposal to eliminate the LEA is based on CUB's unsubstantiated concerns regarding the Company's ability to comply with the CPP at a reasonable cost and maintain its customer base in the face of alternative technologies. Therefore, CUB's claim that it has not yet made up its mind on these issues is at odds with CUB's primary proposal on the LEA.

For example, Mr. Jenks clarifies that CUB's position is not that NW Natural cannot decarbonize.[9] But if CUB has not concluded that NW Natural cannot decarbonize,[10] and is not asking the Commission to evaluate NW Natural's CPP compliance strategy in this docket,[11] then it is unclear how Mr. Jenks supports his recommendation that the LEA be eliminated. Similarly, Mr. Jenks states that CUB's recommendation is based on the "current costs of compliance tools,"[12] which is inconsistent with his statement that the Commission should not evaluate CPP compliance in this docket. We agree with Mr. Jenks that the appropriate docket for evaluating the Company's CPP compliance strategy is its integrated resource plan ("IRP"),[13] and this evaluation has not yet occurred. Therefore, there is no basis for the Commission to conclude in this case that the LEA must be eliminated to address hypothetical risks stemming from the Company's ability to comply with the CPP.

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[9] CUB/400, Jenks/7.

[10] CUB/400, Jenks/7.

[11] CUB/400, Jenks/14; NW Natural/2401, Heiting-Bracken (CUB Response to NW Natural Data Request No. 1) (Jul. 19, 2022).

[12] CUB/400, Jenks/25.

[13] CUB/400, Jenks/14.

In addition, Mr. Jenks states that “the goal of this proceeding is not to speculate regarding the future of the natural gas system in Oregon.”[14] We agree. However, it appears that Mr. Jenks is doing just that by urging the Commission to eliminate NW Natural’s LEA based on “the risks associated with the gas system in a state that is committed to reducing GHG emissions.”[15] His position necessarily rejects NW Natural’s explanation that NW Natural expects to be able to decarbonize at a reasonable cost and therefore decarbonization does not pose a risk that must be mitigated immediately by eliminating the LEA.

In short, it is unreasonable for CUB to propose to eliminate NW Natural’s LEA based on broad concerns about the Company’s ability to address the challenges presented by the CPP and technological advances, and then fault the Company for attempting to “broaden the narrow issue before the Commission in this proceeding” when it attempts to respond.[16] To be clear, NW Natural agrees with CUB[17] (and the Coalition[18]) that broader energy policy issues and the future of gas utilities should not be the basis for a decision on the Company’s LEA in this case, but we nevertheless respond to the unsubstantiated claims and speculation regarding these broader issues that make up the majority of the rationale being put

[14] CUB/400, Jenks/5.

[15] CUB/400, Jenks/3.

[16] CUB/400, Jenks/4.

[17] CUB/400, Jenks/14.

[18] Coalition/500, Burgess/2.

forward by witnesses in this case recommending the Commission eliminate NW Natural's LEA.

In addition to being inconsistent with CUB's positions—as clarified by Mr. Jenks on rebuttal—CUB's recommendation to eliminate the LEA could cause the significant harm to NW Natural and its customers that CUB's proposal is intended to prevent. As discussed in more detail below, elimination of the LEA is likely to significantly decrease customer additions, which is likely to increase rates paid by gas customers and, in turn, drive customer attrition and the potential stranded costs that Mr. Jenks argues need to be avoided.

Q. Mr. Jenks also claims that NW Natural did not acknowledge and discuss the implications of the business model challenges that CUB identified in its Opening Testimony.[19] Is this claim accurate?

A. No. Mr. Jenks identified three challenges to the natural gas business model in his Opening Testimony: (1) the transition away from gas furnaces to electric heat pumps; (2) the need to rapidly reduce GHG emissions to respond to climate change and comply with the CPP; and (3) increased prices due to the heightened cost of conventional natural gas and incorporation of more expensive renewable natural gas ("RNG") options.[20] In our Reply Testimony, we acknowledged the challenge of climate change and the transformation that will need to occur for both gas and electric utilities to decarbonize.[21] We also explained why the challenges

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[19] CUB/400, Jenks/4.

[20] CUB/100, Jenks/2-6; CUB/400, Jenks/4.

[21] NW Natural/1700, Heiting-Bracken/12, 50.

Mr. Jenks identified can be met by NW Natural and most certainly should not be met through the elimination of the Company's LEA in this case.[22]

First, we demonstrated that customers are not in fact transitioning away from gas furnaces to heat pumps in significant numbers, and we see no data to suggest a significant change in current trends will occur. On this point, we provided evidence showing that the percentage of customers preferring electric heat pumps has remained consistent over the last decade,[23] and explained that our current data show that the share of new construction in NW Natural's service territory that connects to the Company's system over the last decade has remained consistent while the number of customers leaving has actually decreased.[24] Later in his Rebuttal Testimony, Mr. Jenks acknowledged that customers are not currently leaving the gas system and also recognized that installing a heat pump does not require leaving the gas system entirely.[25]

Second, we explained that NW Natural is confident that it can substantially decarbonize by 2050, as required by the CPP, at a reasonable cost, and we detailed our preliminary modeling regarding how we can comply with the CPP.[26]

Third, we rebutted claims that conventional natural gas prices will likely remain high and explained that our preliminary analyses show that we can

[22] *See* NW Natural/1700, Heiting-Bracken/39-71 (discussing how NW Natural can comply with the CPP while serving new customers).

[23] NW Natural/1700, Heiting-Bracken/53.

[24] NW Natural/1700, Heiting-Bracken/72-74.

[25] CUB/400, Jenks/10.

[26] NW Natural/1700, Heiting-Bracken/39-40, 44-68.

decarbonize our gas supply at a reasonable cost.[27] Mr. Jenks's claim that we did not acknowledge or discuss his concerns is simply not accurate.

Q. Do you agree with CUB's assertion that because these business model risks are included in the Company's 10-K, the potential for the risks to occur should inform the Commission's decision on the Company's LEA?[28]

A. No. CUB's argument demonstrates a misunderstanding of the purpose and content of the "risk factors" section of the Form 10-K filed with the SEC. Risk factors are required by the SEC's Form 10-K and do not represent inevitable outcomes, nor do they speak to the probability of occurrence. For example, high impact but very low probability items are included in risk factors—like a catastrophic earthquake or a major operational issue. That does not mean these events are likely to occur, or that the Commission must immediately take action to mitigate them. As we explained above, the evidence in the record shows that the risks identified by CUB have not materialized, and NW Natural is well-prepared to evolve as necessary to meet future challenges.

It should also be noted that electric utilities include similar investor disclosures that recognize a range of possible risks.[29] Examples include: the

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[27] NW Natural/1700, Heiting-Bracken/64, 68-69.

[28] CUB/400, Jenks/3.

[29] For further discussion of Risk Factors, *see, e.g.*, Portland General Electric 2021 Annual Report, Risk Factors, at 21-31, https://investors.portlandgeneral.com/static-files/1fc45624-5d9c-4402-b6d1-d2dcb6138364 [hereinafter "PGE 2021 Annual Report"]; and Berkshire Hathaway Energy Company/PacifiCorp 2021 Annual Report, Risk Factors, at 81-94, https://www.brkenergy.com/assets/upload/financial-filing/20211231_PAC%20Form%2010-K.pdf [hereinafter "PacifiCorp 2021 Annual Report"].

potential to not achieve GHG reduction targets[30]; the reliability risks to the electric system of insufficient capacity or extreme weather[31]; the development of alternative technologies and changes in legislation and regulation that may negatively impact the value of facilities[32]; and the potential for lower demand and higher costs to customers.[33]

[30] *See* PGE 2021 Annual Report at 23 ("Future laws and regulations could mandate new or additional GHG emissions reductions that could lead to increased capital and operating costs and have an adverse impact on the Company's results of operations,"); PacifiCorp 2021 Annual Report at 86 ("New federal, regional, state and international accords, legislation, regulation, or judicial proceedings limiting GHG emissions could have a material adverse impact on the Registrants, the United States and the global economy….").

[31] PGE 2021 Annual Report at 27-28 (addressing reliability risks to the electric system related to insufficient capacity or extreme weather and stating, "The effects of unseasonable or extreme weather and other natural phenomena can adversely affect the Company's financial condition and results of operations, and the effects of climate change could result in more intense, frequent, and extreme weather events"); PacifiCorp 2021 Annual Report at 83 ("The risk of catastrophic and severe wildfires has increased in the western United States giving rise to large damage claims against utilities for fire-related losses. Catastrophic and severe wildfires can occur in PacifiCorp, Nevada Power and Sierra Pacific's ("Western Domestic Utilities") service territory even when the Western Domestic Utilities effectively implement their wildfire mitigation plans and prudently manage their systems").

[32] *See* PGE 2021 Annual Report at 30 ("Development of alternative technologies and changes in legislation and regulation may negatively impact the value of PGE's facilities"); PacifiCorp 2021 Annual Report at 86 ("Implementing actions required under, and otherwise complying with, new federal and state laws and regulations and changes in existing ones are among the most challenging aspects of managing utility operations. The Registrants cannot accurately predict the type or scope of future laws and regulations that may be enacted, changes in existing ones or new interpretations by agency orders or court decisions, nor can each Registrant determine their impact on it at this time; however, any one of these could adversely affect each Registrant's financial results through higher capital expenditures and operating costs, early closure of generating facilities or lower tax benefits or restrict or otherwise cause an adverse change in how each Registrant operates its business").

[33] PGE 2021 Annual Report at 30 (discussing lower demand leading to higher operating costs and stating, "A decrease in customer demand for electricity may negatively impact PGE's business"); PacifiCorp 2021 Annual Report at 86 ("Consumer demand for energy may increase or decrease, based on overall changes in weather and as customers promote lower energy consumption through the continued use of energy efficiency programs or other means…."); *Id.* At 90 ("A significant sustained decrease in demand for electricity or natural gas in the markets served by each Registrant would decrease its operating revenue, could impact its planned capital expenditures and could adversely affect its financial results. A significant sustained decrease in demand for electricity or natural gas in the markets served by each Registrant would decrease its operating revenue, could impact its planned capital expenditures and could adversely affect its financial results").

Q. Mr. Jenks clarified that CUB's position is not that NW Natural cannot decarbonize—but rather that NW Natural has not demonstrated that it can comply with the CPP because the compliance plan the Company submitted in docket UM 2178 is flawed and contains unreasonable assumptions.[34] How do you respond to CUB's criticism that the Company's docket UM 2178 analysis was flawed?

A. First, we reiterate that we agree with CUB that broader policy issues about the future of gas utilities should not be part of this deliberation and that "this is a GRC, not an Integrated Resource Plan."[35] However, given that CUB continues to use critiques of the preliminary analysis in docket UM 2178 to support its case for eliminating the Company's LEA, we again emphasize that we disagree. As we explained in our Reply Testimony, NW Natural's research and analysis to-date have provided us with every indication that the Company *can* comply with the CPP. It is precisely for this reason that we believe CUB's recommendation to eliminate the LEA is unnecessary. We also reiterate that the analysis provided in docket UM 2178 was preliminary.[36] We are now close to completing our IRP analysis,[37] which is robust and comprehensive, and the Commission and stakeholders—including CUB—will have the opportunity to evaluate that analysis in the coming months.

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[34] CUB/400, Jenks/7.

[35] CUB/400, Jenks/14.

[36] NW Natural/1700, Heiting-Bracken/44-45, 47-48, 56.

[37] Due to the complexity of the new modeling software required to analyze CPP compliance, the Company's IRP filing has been delayed slightly since we filed our Reply Testimony. We now expect the draft IRP to be distributed on July 29, 2022, and the final IRP to be filed on September 23, 2022.

Q. In criticizing the Company's CPP compliance modeling, CUB emphasizes the significant increase in energy efficiency spending, claiming that incremental energy efficiency spending will be about $300 million by 2035.[38] Is this accurate?

A. No. In support of its claim about the cost of the Company's modeled energy efficiency spending, CUB provided a chart showing "Total CPP Compliance Costs," which reflected "Incremental Energy Efficiency Costs" of more than $300 million.[39] CUB stated that the chart showed the compliance costs from NW Natural's docket UM 2178 modeling.[40] However, the energy efficiency spending numbers and chart that CUB provided are from a prior draft of the Company's modeling filed on September 15, 2021 that contained an error in the energy efficiency calculations.[41] NW Natural made an updated filing in docket UM 2178 on September 24, 2021, to replace the figures referenced in Mr. Jenks' testimony.[42]

Therefore, the information regarding energy efficiency spending in CUB's testimony is inaccurate and very significantly over-states the amount of energy

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[38] CUB/400, Jenks/13.

[39] CUB/400, Jenks/13.

[40] CUB/400, Jenks/12.

[41] *See* Docket UM 2178, NW Natural's Compliance Modeling Presentation – Second Update, at 1 (Sept. 24, 2021) ("NW Natural identified an error in its calculation of the costs associated with energy efficiency in the workbooks it filed in this process on September 8, 2021 and the presentation presented on September 14th based upon that work, subsequently filed on September 15, 2021. . . . This correction reduces the expected cost of energy efficiency in most years of the base case and the sensitivities/scenarios.").

[42] *Id*.

efficiency spending that we anticipate would be required to comply with the CPP.[43] In its Opening Testimony, CUB claimed that NW Natural projects energy efficiency spending of more than $400 million per year.[44] In our Reply Testimony, we provided the correct figures that are associated with our base compliance case in docket UM 2178 and explained that the highest annual cost associated with energy efficiency work in our modeling is approximately $150 million in 2047—not $400 million per year as CUB had claimed.[45] In Rebuttal Testimony, CUB does not acknowledge the corrected information we provided, and instead provides incorrect energy-efficiency spending figures associated with the previous round of analysis that was corrected in docket UM 2178.[46] To be clear, the Company's preliminary modeling does *not* predict incremental energy efficiency spending anywhere near the $300 million figure that CUB now provides.[47]

Q. Mr. Jenks clarifies that CUB is "well aware of the challenges associated with electric utilities and their efforts to decarbonize affordably while maintaining reliability."[48] Please respond.

A. We appreciate CUB's acknowledgment that affordable decarbonization of the electric system presents challenges and will require a combination of many

[43] NW Natural/1700, Heiting-Bracken/69.

[44] CUB/100, Jenks/5-6.

[45] NW Natural/1700, Heiting-Bracken/69.

[46] CUB/400, Jenks/13.

[47] CUB/400, Jenks/13.

[48] CUB/400, Jenks/7.

demand- and supply-side strategies.[49] It is precisely because of these challenges that NW Natural recommends that the Commission, "undertake an analysis that comprehensively examines Oregon's electric and gas systems to understand how electrification impacts each system's cost, reliability, and ability to decarbonize in the context of compliance with the CPP and HB 2021"—to properly inform what, if any, change to the Company's LEA is appropriate and justified.[50] Additionally, a primary input to such a study should be the results of coordinated gas and electric utility resource planning, which would include assumptions regarding GHG emissions compliance and any assumed electrification.[51]

Q. Mr. Jenks states that NW Natural did not provide evidence to support its concern that changing the LEA could send a negative signal to investors about the Company's future and questions whether the Company's concern is valid.[52] Ms. Heiting, how do you respond?

A. I disagree with Mr. Jenks that the Company's concern is not valid and with his suggestion that NW Natural could avoid any negative impacts by simply explaining the changed circumstances to its investors.[53] The results of this proceeding could influence the investment community's views of Oregon's regulatory environment and the health of NW Natural's finances. A reduction to, or full elimination of, NW

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[49] CUB/400, Jenks/8.

[50] NW Natural/1700, Heiting-Bracken/15.

[51] *See* Docket UM 2178, Staff's Draft Natural Gas Fact Finding Report at 23 (Apr. 15, 2022) (recommending that the Commission "[r]equest gas and electric utilities to develop and articulate individual electrification assumptions in future gas and electric IRPs that others can reference.").

[52] CUB/400, Jenks/20-21.

[53] CUB/400, Jenks/21.

Natural's LEA will impact customer growth and the ability of NW Natural to add economically viable customers, which are the exact type of regulatory outcomes that the investment community reviews when evaluating investment risk. Moreover, to the extent that the Commission were to eliminate NW Natural's LEA based on the concerns that CUB and the Coalition have raised, the Company cannot imagine an "explanation" the Company could provide to investors that could mitigate the negative signal sent.

Q. Mr. Jenks testifies that CUB's proposal to eliminate the LEA is not an attempt to drive electrification of building load, but is instead "a fact-based examination of subsidies that exist within the current NWN LEA that are exacerbated by CPP compliance obligations."[54] Please respond.

A. As an initial matter, we take issue with Mr. Jenks's characterization of the LEA as a "subsidy"—both here and throughout his testimony.[55] That term is not accurate, as explained in depth by Mr. Taylor.[56] The LEA is not a subsidy, and in fact the whole point of an LEA is to ensure that new customers are not subsidizing existing customers and vice versa.

Second, we appreciate CUB clarifying that its proposal is not motivated by a desire to drive building electrification. We understand that CUB seeks to mitigate the perceived risk of stranded assets due to customers departing the system.[57] As

[54] CUB/400, Jenks/23.

[55] *See, e.g.*, CUB/400, Jenks/23, lines 4 and 7; CUB/400, Jenks/25, lines 11 and 14-15.

[56] NW Natural/1800, Taylor/37.

[57] CUB/400, Jenks/8 ("CUB is concerned about the risk of stranded costs…"); Jenks/9 ("Stranded cost is a risk, not a certainty.").

we explained in our Reply Testimony and above, we do not agree that substantial numbers of customers are departing the system now or will do so in the future.[58] Moreover, CUB's LEA proposal would not have the effect of protecting existing customers from increased costs, but instead would actually make them worse off.

Q. Please explain why eliminating the LEA would make existing customers worse off.

A. Regardless of CUB's intended purpose in proposing to eliminate the LEA or CUB's expectation regarding how potential customers will respond,[59] the fact is that elimination of the LEA <u>will</u> inevitably create an economic disincentive for customers to join the system. Coalition witness Mr. Burgess acknowledges that the absence of an LEA would affect at least some customers' decisions.[60] And based on NW Natural's experience working with developers, we understand that developers are sensitive to minimizing the initial construction cost and do take the LEAs available to them into account when making energy choices. In particular, we have seen that developers choose not to connect to the gas system where, in their view, the LEA is insufficient to render their project economic. We believe that not only will elimination of the LEA tilt the playing field against gas service, it could well be the deciding factor, potentially significantly driving down customer additions and causing higher costs to existing customers.

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[58] NW Natural/1700, Heiting-Bracken/72-75.

[59] CUB/400, Jenks/25.

[60] Coalition/500, Burgess/11.

Moreover, our preliminary CPP compliance modeling shows that fewer new customers make existing customers worse off, even in the aggressive electrification scenarios that Staff asked NW Natural to model in docket UM 2178, because the benefit of spreading system-wide fixed costs across more customers outweighs the impact of higher incremental per-customer compliance costs associated with customer growth. This is because there are numerous essential utility costs, like customer billing system software, that are largely fixed costs that are not dependent upon how many customers a utility serves. The more customers there are to spread these fixed costs over, the lower the cost per customer of these items.

In our docket UM 2178 modeling, we analyzed three scenarios in which no new customers are added to the system, and the residential bill impacts are shown in our modeling presentation.[61] The "customer decline" scenario in which no new customers are added and existing customers slowly decline resulted in *higher* residential bill impacts by 2050 for the customers that remain on the system than the "base case scenario."[62] The "aggressive electrification" and "aggressive & rapid electrification" scenarios, in which no new customers are added and existing customers rapidly decline, resulted in a more than *300 percent* increase in residential customer bills by 2050.[63] It is also worth noting that all three no-growth

[61] Docket UM 2178, NW Natural Presentation "OPUC Natural Gas Fact-Finding Staff Alternate Scenarios Addendum," Slide 12 (Nov. 17, 2021).

[62] *Id*.

[63] *Id.*

scenarios resulted in much higher bill impacts than any of the other scenarios we modeled.

Q. In light of the clarifications and additional information in Mr. Jenks's testimony, is there support in the record for CUB's proposal to eliminate the LEA?

A. No, there is simply no evidence supporting CUB's proposal that NW Natural's LEA be eliminated over the next two years. As Mr. Taylor has explained, the LEA is a universal mechanism intended to promote fairness by properly allocating costs of a new customer joining the system.[64] CUB claims that eliminating the LEA is necessary to address "*current*" gas system risks,[65] but at this point CUB's concerns about current risks are simply speculation—supported by little or no data. NW Natural agrees with CUB that "a speculative and future-based discussion is not germane to the topics at issue[] in this GRC,"[66] and it makes no sense for the Commission to fundamentally alter the current regulatory framework in the absence of data showing that the changes CUB cites as a risk are currently occurring.

[64] NW Natural/2600, Taylor/2-3.

[65] CUB/400, Jenks/3 (emphasis in original).

[66] CUB/400, Jenks/9.

Q. To the extent the Commission wishes to consider changes to the LEA related to concerns about stranded assets, do you agree with Mr. Jenks's suggestion that it should do so in this case because LEAs are typically examined in general rate cases ("GRCs") and CUB's proposal affects only NW Natural?[67]

A. No. CUB's concerns about stranded assets and the future of the gas system are not specific to one utility's LEA. The policy change being suggested, as well as CUB's justification for triggering it, have significant consequences to NW Natural customers, the Company, and economic development and energy system reliability in the communities we serve. These impacts are equally applicable to the other Oregon local distribution companies ("LDCs") and electric investor-owned utilities ("IOUs"), and if the Commission wishes to consider them, a generic proceeding would allow for a more comprehensive record than has been presented in this case. Staff notes that the issues CUB and the Coalition raise regarding the LEA should be handled in a separate docket where "all stakeholders are given adequate opportunity to participate" and a "common decision-making framework" can be applied to all three natural gas utilities—not in one utility's rate case.[68] AWEC also expresses concern regarding the "limited stakeholder participation" provided by addressing LEA issues in this rate case.[69] NW Natural would add that

[67] CUB/400, Jenks/14, 23.

[68] Staff/1800, Muldoon/26, 29.

[69] *See* AWEC/200, Mullins/2, 19 ("at the conclusion of UM 2178, that the Commission open a docket to discuss line extension allowances for gas utilities.").

a generic docket could also involve the electric utilities to allow room for exploration of alternative proposals—such as line extension policies that more robustly support hybrid technology like dual fuel heat pumps.[70]

Q. In addition to eliminating the LEA, Mr. Jenks also recommends phasing out the presumption of prudence for growth-related investments and requiring the Company to demonstrate the prudence of these investments.[71] How do you respond?

A. To the extent Mr. Jenks is suggesting that capital investments related to customer extensions do not undergo a prudence review, we disagree. As Mr. Taylor explains, NW Natural understands that construction allowances provided under the LEA are subject to review by the Commission and to the same prudence standard as other utility capital investments.[72]

We also note that to the extent Mr. Jenks is proposing to change a Commission policy or rule, such a change would presumably apply to all utilities—not just natural gas utilities and not just NW Natural. Therefore, NW Natural's GRC is not the appropriate docket in which to explore Mr. Jenks's proposal.

B. Response to the Coalition.

Q. Why does the Coalition seek to eliminate the LEA?

A. Like CUB, the Coalition raises concerns regarding harm to existing customers from expanding the gas system, but it also seems clear that the Coalition's LEA

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70 *See* CUB/400, Jenks/31.

71 CUB/400, Jenks/11, 34.

72 NW Natural/1800, Taylor/53.

proposal is designed to discourage customers from joining the gas system in order to promote building electrification to address climate change. While Mr. Burgess appears to disavow an electrification agenda, asserting that reducing LEAs does not "definitively" lead to electrification,[73] the Coalition's testimony makes clear that their LEA proposal is motivated—at least in part—by a desire to combat climate change by reducing the use of fossil gas.[74] For example, Ms. Apter testifies that the Commission has a "moral imperative" to take action on LEAs now in order to address the burden climate change imposes on youth and "address the causes of climate change."[75]

Q. Does NW Natural oppose taking action to combat climate change?

A. Absolutely not. We have never disagreed that there is a moral imperative to radically decarbonize. As we explained in our Reply Testimony, we recognize the significant challenge posed by climate change and acknowledge that the State's policy makers should consider how to respond.[76] NW Natural has been focused on strategies for reducing its own GHG emissions for over a decade and has been a leader in the industry regarding the need to respond to climate change.[77] We are prepared and working hard every day to meet the challenge posed by the

[73] Coalition/500, Burgess/16.

[74] *See, e.g.*, Coalition/600, Apter/3; Coalition/700, Stewart/27.

[75] Coalition/600, Apter/2, 3.

[76] NW Natural/1700, Heiting-Bracken/12.

[77] NW Natural/1700, Heiting-Bracken/40.

climate crisis and we simply disagree that driving all energy demand to the electric system is a reasonable solution.

Q. Does the Company agree that the Commission can or should eliminate the LEA to combat climate change?

A. No. We certainly do not agree that eliminating NW Natural's LEA will advance the fight against climate change, or that it would be appropriate for the Commission to make a determination on this issue in this case.

NW Natural believes the most important metric to consider when evaluating climate change is the total amount of economy-wide emissions under different scenarios. In Oregon, the CPP and HB 2021 already require significant emissions reductions from the energy sector. The requirements for gas utilities in the CPP and electric utilities under HB 2021 are absolute emissions reduction requirements in specific years that do not vary with load. So no matter what *method* is used to decarbonize, the same emission reductions are expected for both electric and gas utilities. This remains true for both electric and gas utilities as new connects are added to the electric and gas systems. The Coalition is advocating that the Commission make a decision on *how* the emissions reduction requirements of the CPP and HB 2021 are met in this GRC, which is inappropriate.

We also disagree that the LEA should be eliminated in this case to mitigate harm to existing customers, for the reasons we discuss above and below.

1. The Commission does not have adequate information to support a finding that NW Natural's LEA must be eliminated to protect existing customers.

Q. The Coalition rejects NW Natural's argument that there is insufficient evidence in the record on which to base a decision to eliminate NW Natural's LEA, and instead argues that the Commission should move ahead to eliminate the LEA now as a "necessary and cautious protective measure."[78] How do you respond?

A. We disagree for all of the reasons explained in depth in our Reply Testimony. In addition, we note that in suggesting that the Coalition's proposal is a "precaution," the Coalition incorrectly implies that elimination of the LEA is a simple matter with no real repercussions. However, the Coalition's advocacy makes it clear that they intend that by eliminating the LEA fewer people will join the system—which will certainly have a significant impact on NW Natural and its customers. Moreover, as we have explained, fewer customers joining the system will increase per customer costs and then drive additional customer attrition. In short, there is nothing simple in the Coalition's proposal.

[78] Coalition/600, Apter/4.

Q. The Coalition specifically claims that resolving its LEA proposal "does not require a larger analysis about how Oregon's economy should decarbonize, whether the gas utility has a place in Oregon, or whether the electric utilities can manage additional load."[79] Can you please respond?

A. This statement is contradicted by the fact that the Coalition supports its LEA proposal by claiming that building electrification is more viable and affordable than decarbonizing the gas system. Thus, the Commission cannot accept the Coalition's LEA recommendation unless it rejects NW Natural's evidence to the contrary—or unless it postpones a decision to a future docket to allow for additional analysis.

Q. Mr. Burgess supports the Coalition's claim that the Commission has adequate information to eliminate the LEA in this case by pointing to the Commission's 2001 investigation establishing line extension rules and noting that the Commission received no stakeholder comments in that docket.[80] Is this an apt comparison?

A. No. Here, the Coalition is proposing to entirely eliminate the LEA, which, as Mr. Taylor points out, is a feature of virtually all utility cost recovery frameworks.[81] The proposals in this case are not analogous to the investigation from more than 20 years ago. Further, the Coalition's proposal is based on its stated belief that buildings should be electrified and gas service should be eliminated—a goal which

[79] Coalition/700, Stewart/3.

[80] Coalition/500, Burgess/16.

[81] NW Natural/1800, Taylor/25-26.

it believes will be furthered by the elimination of the LEA. These positions raise serious issues and should not be addressed on an incomplete record.

2. The Coalition has not shown that customers are leaving or will leave the gas system in high numbers in the future.

Q. The Coalition offers significant testimony regarding the factors that it contends are causing and will cause customers to prefer electric heat pumps over gas furnaces.[82] How do you respond?

A. We will not respond in detail to every claim the Coalition makes, but the bottom line is that our data do not support the Coalition's claim that customers prefer heat pumps and are installing or will install them in increasing numbers in the future. As explained in our Reply Testimony, new customers have continued to connect to NW Natural's system at rates consistent with long-term trends and fewer and fewer existing customers have chosen to leave the system over time.[83] The NEEA Building Stock Assessment on which Mr. Stewart relies actually supports our experience, showing that gas heating increased to 58 percent of single-family homes in Oregon, whereas ducted air source heat pumps remained at 11 percent of installations in the Pacific Northwest, with mini-split heat pump increasing in penetration from 1 to 4 percent.[84]

Thus, while it is appropriate to monitor gas system growth, technological advances, and trends in customer preference, the current data simply do not

[82] Coalition/600, Apter/13; Coalition/700, Stewart/5-9.

[83] NW Natural/1700, Heiting-Bracken/73-74.

[84] Coalition/706, Stewart/29.

support taking a significant step like eliminating the LEA. Making such a significant change based only on incorrect assertions that customer departures are occurring or speculation they will occur is neither wise nor appropriate.

Q. Would you care to respond to any of the specific information Mr. Stewart provided on the topic of the alleged customer preference for heat pumps?

A. Yes, but only briefly given that we agree with CUB and the Coalition that broader policy issues about the future of gas utilities should not be the primary decider of the LEA issue in this case. First, we note that much of the data on which Mr. Stewart relies is nationwide data, which, as we have explained, is not consistent with what NW Natural is seeing in Oregon.

Second, we note that the RMI study of electrification cost in Eugene referenced by Mr. Stewart suffers from the same flaws as the RMI study of Seattle referenced by Mr. Burgess in Response Testimony and addressed in our Reply Testimony and that of Mr. Taylor.[85] Eugene's electric emissions profile, like that of Seattle, is not representative of NW Natural's service territory in that it is dominated by hydroelectric generation. This is not the case for the investor-owned electric utilities serving Oregon, whose generation mix includes substantial fossil fuels. Roughly eight out of nine gas utility customers in Oregon receives electric service from an IOU. The average emissions intensity of all electricity serving Oregon's gas utility customers is roughly 10 times the emissions intensity of the electricity serving customers in Eugene.

[85] NW Natural/1700, Heiting-Bracken/35; NW Natural/1800, Taylor/49-50.

Third, Mr. Stewart's discussion regarding Energy Star's position on gas equipment is misleading.[86] The Energy Star program includes approximately 400 high-efficiency residential gas furnaces, approximately 400 high-efficiency gas tank water heaters and approximately 200 high-efficiency gas tankless water heaters.[87] However, Mr. Stewart selectively uses only some elements of the Energy Star website, while excluding others, to support his point of view. Reviewing a more complete picture of Energy Star material shows an overall endorsement of using the highest level of efficiency available for either gas or electric equipment.

Q. The Coalition witnesses also reiterate their concerns regarding the impacts of gas stoves on indoor air quality, and suggest that awareness of these concerns will cause customers to move away from gas cooking.[88] What is your response?

A. The reports cited by the Coalition agree with a key point of our Reply Testimony on this topic—adequate ventilation is important.[89] We will continue to monitor information regarding indoor air quality and cooking from the federal agencies charged with its oversight. As to the Coalition's claims, NW Natural is not seeing an increase in customer attrition—for this or any other reason.

86 Coalition/700, Stewart/8.

87 Energy Star, *Energy Efficient Products for Consumers* (https://www.energystar.gov/products) (last visited: July 19, 2022).

88 Coalition/600, Apter/10-11; Coalition/800, Ryan/16-17.

89 NW Natural/1700, Heiting-Bracken/75-76.

We do want to respond on one point raised by Ms. Apter regarding nitrous oxide ("NOx") emissions caused by hydrogen gas.[90] The study Ms. Apter cites to support her claims[91] uses computer modeling to predict NOx emissions from a swirl burner—a relatively novel design used in industrial boilers and in power generation.[92] These burners are not used in standard appliances in homes and businesses. Moreover, the study does not verify any of its modeled estimates with measured lab values for hydrogen, which is unreasonable for making accurate conclusions.

Conversely, studies that have directly measured NOx emissions from standard appliances using hydrogen blends show decreasing NOx emissions.[93] In short, the study on which Ms. Apter relies to support her claim that NOx emissions are higher with hydrogen does not represent real-life appliance emissions, nor is it relevant for system-wide hydrogen blending. It is also important to note that we do not expect existing natural gas burners to be used to deliver 100 percent

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[90] Coalition/600, Apter/7.

[91] Mehmet Salih Cellek & Ali Pinarbasi, Investigations on Performance and Emission Characteristics of an Industrial Low Swirl Burner While Burning Natural Gas, Methane, Hydrogen-Enriched Natural Gas and Hydrogen as Fuels, 43 Int'l J. of Hydrogen Energy 1194 (Jan. 11, 2018), https://www.sciencedirect.com/science/article/abs/pii/S0360319917319791?via%3Dihub.

[92] Cheng, R. K. (n.d.). *Small-scale distributed generation workshop - ARPA-e*. Retrieved July 18, 2022, from https://www.arpa-e.energy.gov/sites/default/files/documents/files/SSDG_Workshop_DGShum.pdf.

[93] *See, e.g.*, Glanville P, Fridlyand A, Sutherland B, Liszka M, Zhao Y, Bingham L, Jorgensen K. Impact of Hydrogen/Natural Gas Blends on Partially Premixed Combustion Equipment: NO_x Emission and Operational Performance. *Energies*. 2022; 15(5):1706. https://doi.org/10.3390/en15051706; Suchovsky, C. J., Ericksen, L., Williams, T., & Nikolic, D. (2021, May). *Appliance and equipment performance with hydrogen-enriched ... - CSA group*. https://www.csagroup.org/wp-content/uploads/CSA-Group-Research-Appliance-and-Equipment-Performance-with-Hydrogen-Enriched-Natural-Gases.pdf. Retrieved July 18, 2022, from https://www.csagroup.org/wp-content/uploads/CSA-Group-Research-Appliance-and-Equipment-Performance-with-Hydrogen-Enriched-Natural-Gases.pdf.

hydrogen. In future systems built or modified to specifically deliver 100 percent hydrogen, we expect burners to be purposely designed for this use.

3. The Coalition has not shown that building electrification is a viable, reliable, and cost-effective way of decreasing emissions and serving peak load in Oregon.

Q. In response to NW Natural's concerns regarding impacts to the electric system from adding electrified building load, the Coalition testified that the electric grid will not be overwhelmed by building electrification and that "even a very aggressive building electrification scenario in Oregon would have modest impacts on the electric system peak load conditions, with total building peak load projected to increase at an average growth rate of less than 1 percent."[94] How do you respond?

A. The study cited by the Coalition is dated June 23, 2022, and NW Natural was not made aware of its existence until the Coalition's testimony. We have had very limited time in which to perform a review and would like to explore some of the underlying assumptions in more detail. By means of example, the Synapse study "…assumes that heat pumps for space heating do not require any electric backup heating in Oregon[.]"[95] Additionally, it does not appear that the study evaluates any scenarios that include gas utility decarbonization against which to compare the costs of the electrification scenarios analyzed, and the study does not evaluate

[94] Coalition/500, Burgess/17.

[95] Synapse Energy, K. Takahashi et al., "Toward Net Zero Emissions from Oregon Buildings," June 23, 2022, Ex. Coalition/706 Stewart/26.

the peak heating impact of heat pumps in a way that is in line with current installations and performance in Oregon.[96]

At minimum, the existence of competing studies from opposing parties underscores the need for a Commission-sponsored, comprehensive analysis regarding the ability of Oregon's energy system to reliably and affordably serve peak load.

Q. Mr. Stewart also cites a study that concluded installation of heat pumps will produce 70 percent less emissions.[97] How do you respond?

A. While we have not had an opportunity to review that study in-depth, we have identified several concerns that undermine its conclusion. First, as Mr. Stewart notes,[98] the study was based on plans and policies as of June 1, 2020, which means that not only does it not account for HB 2021, it also does not account for the CPP and the fact that NW Natural's system will be decarbonizing in the coming years. Second, the study appears to rely on predicted emissions data from the National Renewable Energy Laboratory ("NREL") generated with computer modeling, which NREL expressly cautions against using without critically comparing the modeled data with empirical data.[99] Third, one of the primary

[96] Coalition/706 Stewart/29.

[97] Coalition/700, Stewart/11-12 (citing Coalition/708, Stewart).

[98] Coalition/700, Stewart/12.

[99] NREL, *Energy Analysis* (https://www.nrel.gov/analysis/cambium.html) (last visited: July 19, 2022) ("Cambium relies on models, which are necessarily simplifications of reality. The data produced by those models therefore deviate from reality to some degree. We strongly encourage users to critically evaluate the suitability of Cambium metrics for new analyses by reviewing existing literature and comparing Cambium data against empirical data where possible.").

drivers for the study's conclusions is the flawed assumption of a very high methane leak rate for the gas system.[100]

And while electric heat pumps may result in slight emissions reductions compared to gas furnaces—depending on the electric provider—our own analyses show that if all gas heating in the state were replaced with electric heat pumps tomorrow, it would reduce emissions in the state by roughly one percent, as we explained in our Reply Testimony.[101] Moreover, it is important to reiterate that the requirements of electric IOUs under HB 2021 and gas LDCs under the CPP are absolute emissions reduction requirements by utility, regardless of load and other factors. As such, the total amount of emissions from electric and gas utilities in the state is expected to be the same, by obligation, regardless of how Oregon buildings are heated.

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[100] The methane-leak-rate assumption is flawed and inapplicable to NW Natural because:

1) The study incorrectly sums estimated emissions intensities from two separate studies with very different methodologies, which is inconsistent with emissions-rate accounting protocols used both by environmental regulators and within the industry. The emissions values referred to combine a regional production intensity measure from Alvarez et. al, extrapolated to a national value assuming 100% domestic production, with emissions from a regional study of 75 homes in California. Disparate measurement methodologies cannot be summed accurately as these rates rely on wholly different denominators and means of measure. The maximum emission ranges derived from this approach were then used for an incorrect leak rate.

2) The study references three publications to justify the assumed methane-leakage rate, but none of these are the most recent or most representative studies or data sets for estimating emissions rates. See ERM, *Benchmarking Methane and Other GHG Emissions of Oil & Natural Gas Production in the United States* (Updated July 2022) (available at: https://www.sustainability.com/thinking/benchmarking-methane-ghg-emissions-oil-natural-gas-us/).

3) The emission rates used, and associated conclusions, are not applicable to the gas supply NW Natural purchases on behalf of customers. NW Natural purchases two-thirds of its gas supply from Canada and the remainder from the U.S. Rocky Mountains.

[101] NW Natural/1700, Heiting-Bracken/19-20.

Q. Mr. Stewart contests NW Natural's statement that expensive cold climate heat pumps ("CCHPs") are needed to decarbonize—responding that the climate in NW Natural's service territory does not require CCHPs and because the electric sector will be emissions-free in the future, even modestly efficient heat pumps will be emissions free.[102] What is your response?

A. We would point to E3's Oregon Study, which discussed the performance of standard heat pumps versus CCHPs.[103] In E3's heat pump scenarios, the electric heat pump was modeled as being supplemented by electric-resistance back-up heat at 34 degrees and the CCHP at 5 degrees.[104] Because electric-resistance heating is much less efficient than heat pumps, the use of standard heat pumps—rather than CCHPs—means that the electric grid must add significantly more incremental generation capacity to reliably serve peak load during cold-weather events.[105] So while Mr. Stewart is correct that CCHPs are not essential in the Pacific Northwest, he misses our point, which is that CCHPs may be necessary if building heating load is going to be shifted to the electric grid and we still expect the electric grid to provide reliable and affordable service during winter peak events.

[102] Coalition/700, Stewart/20-21.

[103] NW Natural/1700, Heiting-Bracken/29-30 (citing NW Natural/1702, Heiting-Bracken).

[104] NW Natural/1702, Heiting-Bracken/74.

[105] NW Natural/1700, Heiting-Bracken/30 (citing NW Natural/1702, Heiting-Bracken/97-98).

Q. With respect to the cost of building electrification, the Coalition claims that electrification is less expensive than decarbonizing the gas system, according to multiple reputable studies—many of which were conducted in California.[106] What is your response?

A. We disagree. Setting aside California's grid reliability challenges caused by energy policy decisions, as we explained in our Reply Testimony, California is not a valid comparator to Oregon when evaluating meeting winter peak load because the population-weighted heating climate in California is drastically different than the population-weighted heating climate in Oregon.[107] We again reiterate that this disagreement between the Company and the Coalition underscores the need for the Oregon-specific study and coordinated gas and electric utility resource planning that we recommended in our Reply Testimony.[108]

Q. E3 already conducted an Oregon study, which you described in your Reply Testimony,[109] but Mr. Stewart leveled numerous criticisms at E3's assumptions and NW Natural's interpretation of the results.[110] Please respond.

A. We stand behind E3's analysis and our interpretation of it and reiterate that the analysis of peak electric loads from electrification deserves careful consideration.

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[106] Coalition/700, Stewart/11.

[107] NW Natural/1700, Heiting-Bracken/32-33.

[108] NW Natural/1700, Heiting-Bracken/12-13, 15, 36.

[109] NW Natural/1700, Heiting-Bracken/23-30 (discussing NW/Natural/1702, Heiting-Bracken).

[110] *See* Coalition/700, Stewart/13-20.

E3 is a highly regarded consultant and would not have jeopardized its reputation by using unreasonable assumptions in its analysis.

Q. Mr. Stewart also claims that eliminating the LEA "will put downward pressure on rates by avoiding the added cost of subsidizing new gas connections."[111] Do you agree?

A. No. As we explained above in response to CUB, eliminating the LEA will result in fewer new customers joining the system, which in turn will likely result in higher rates for remaining customers. To suggest otherwise ignores the logical consequences of eliminating the LEA. Mr. Stewart appears to contradict his own statement when he states that limiting the expansion of the gas system "lead[s] to only modest increases in rates."[112] As a result, we are unclear as to Mr. Stewart's position.

4. The Coalition has not shown that NW Natural's preliminary analysis indicating it can comply with the CPP is incorrect.

Q. What aspects of the Company's preliminary CPP compliance modeling does the Coalition criticize?

A. Ms. Apter criticizes NW Natural's plans to decarbonize its gas supply. She claims that the availability of RNG is limited and uncertain, and that RNG is expensive.[113] She also claims that hydrogen gas and synthetic gas face cost, availability, and

[111] Coalition/700, Stewart/26.

[112] Coalition/700, Stewart/27.

[113] Coalition/600, Apter/5.

competition challenges to widespread deployment.[114] In addition, Mr. Stewart raises questions regarding the Company's plan to comply through increased energy efficiency.[115] Having addressed these issues in depth in Reply Testimony,[116] and because this is not the appropriate docket for a full review of NW Natural's CPP compliance strategy, we respond only briefly here.

Q. Please respond to the Coalition's criticism regarding the Company's plans to acquire RNG.

A. The Coalition's criticism is unfounded. As Staff notes, the number of RNG projects has accelerated in the last five years, and NW Natural's RNG projects are competitively priced.[117] We expect to be able to acquire sufficient RNG at a reasonable cost—our preliminary modeling predicts that less than 15 percent of current deliveries will be served by biofuel RNG in 2050, a point which Ms. Apter disregards.[118]

Q. Please respond to the Coalition's criticism regarding the Company's plans to acquire hydrogen gas.

A. The myriad concerns raised by the Coalition to suggest that hydrogen gas will not in fact be adopted are inconsistent with the significant progress and robust

[114] Coalition/600, Apter/6-8.

[115] Coalition/700, Stewart/22-23.

[116] NW Natural/1700, Heiting-Bracken/39-71.

[117] Staff/1800, Muldoon/14-15.

[118] NW Natural/1700, Heiting-Bracken/60-65.

development of hydrogen gas we have seen elsewhere in the U.S. and Europe to-date, as detailed in our Reply Testimony.[119]

Q. The Coalition also criticizes the Company's reliance on energy efficiency using gas heat pump technology that is not commercially available.[120] Please respond.

A. We explained in our Reply Testimony why we think it is reasonable to expect gas heat pumps to be commercially available in the near future, and why planning how to decarbonize by 2050 necessarily considers that new technologies will be available over time.[121] Additionally, hybrid technology is available now and shows great benefits to both emissions-reductions and energy-system costs.[122] Finally, as we explained in our Reply Testimony, the Company has many other strategies that can fill the gap if gas heat pumps ultimately are not widely adopted.[123]

Q. Has the Coalition provided a sound basis for concluding that the Company will be unable to comply with the CPP?

A. No. As discussed in our Reply Testimony, both gas and electric utilities face significant challenges in meeting GHG reduction goals and there are numerous uncertainties as to the best path forward—including technological advances that will aid compliance over the next 25 years. For this reason, we need to continue

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[119] NW Natural/1700, Heiting-Bracken/57-60.

[120] Coalition/700, Stewart/22.

[121] NW Natural/1700, Heiting-Bracken/48-50.

[122] NW Natural/1700, Heiting-Bracken/46-47.

[123] NW Natural/1700, Heiting-Bracken/47.

pursuing new technologies and to develop approaches that are both flexible and adaptive—which is consistent with resource planning in general and the Commission's IRP framework in particular. Staff endorses this approach, stating, "Staff believes that practicable solutions to meet Oregon's environmental goals likely will need to rely on multiple approaches including energy efficiency."[124]

5. The Coalition has not shown that the First Stipulation inappropriately permits NW Natural to recover for employee time spent on political activities.

Q. In her Rebuttal Testimony, Ms. Ryan seeks a disallowance related to the salaries of employees who are engaged in discussions with various cities regarding proposals to prohibit adding new customers to the gas system.[125] Ms. Heiting, please explain your understanding of the argument that Ms. Ryan is making.

A. Ms. Ryan references the fact that a number of cities in Oregon are actively engaged in developing GHG emissions strategies, with some in particular discussing the possibility of "gas bans" within their jurisdictions.[126] Ms. Ryan notes that in my Reply Testimony, I explained that NW Natural employees had been engaged in conversations with several of these cities, including making presentations to city councils and expressing concerns about prohibitions on new

[124] Staff/1800, Muldoon/13.

[125] Coalition/900, Ryan/34-43.

[126] Coalition/900, Ryan/35-39.

customer additions.[127] Ms. Ryan argues that recovery from customers for this employee time is inappropriate because these employees are engaged in political activity, the costs of which should be borne by shareholders.[128]

Q. What is your response to Ms. Ryan's argument?

A. As I explained in my Reply Testimony,[129] I disagree that employees participating in discussions with cities about their GHG emissions strategies, including "gas bans," and responding to municipal-level climate-action-planning requests for data, are engaged in political activities. On the contrary, discussions with our jurisdictions regarding policies that will affect our customers are crucial to our delivery of utility service, and therefore the costs of such discussions are recoverable in utility rates. On this point, I want to emphasize that the cities in which we do business expect us to be actively engaged on such matters and routinely seek our input on their proposals. Our participation is not part of a political campaign as suggested by Ms. Ryan.

[127] Coalition/900, Ryan/36.

[128] Coalition/900, Ryan/34, 40-41.

[129] *See* NW Natural/1700, Heiting-Bracken/77-84.

Q. Ms. Ryan specifically raises concerns about NW Natural CEO David Anderson's outreach to Portland City Council Commissioners Rubio and Mapps, and his meeting with Commissioner Rubio.[130] Ms. Heiting, please respond to Ms. Ryan's concerns.

A. While Ms. Ryan does not explain the nature of her concern, she implies that the communications with these city commissioners were political in nature. However, Ms. Ryan provides nothing to support this view. In fact, Portland is the largest city served by NW Natural. Mr. Anderson has always reached out with an initial introduction and to make himself available to new City Council commissioners upon their swearing in and has made himself available to discuss any issue related to NW Natural's service. Ms. Ryan has not provided any evidence to support her view that the costs associated with such conversations are not recoverable.

Q. Ms. Ryan cites to orders of this Commission, which she states support the view that costs related to political activities are not recoverable from customers.[131] Are those orders relevant to the issue in front of this Commission, Ms. Heiting?

A. No. While I am not a lawyer, I understand that the orders to which Ms. Ryan cites generally convey that the costs for lobbying and other activities that are primarily political are not recoverable from customers, but this is not a disputed issue in this case. Rather, the disagreement between NW Natural and the Coalition is whether

[130] Coalition/900, Ryan/39.

[131] Coalition/900, Ryan/40 n.129, n.130.

the activities highlighted by the Coalition are primarily political activities. In my view, the activities Ms. Ryan challenges are core utility activities that are necessary to provide safe and reliable gas service.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Kimberly A. Heiting and Ryan J. Bracken

POLICY
EXHIBIT 2401

July 20, 2022

EXHIBIT 2401 – POLICY

Table of Contents

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July 19, 2022

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Re: UG 435 – NW Natural's Request for a General Rate Revision, CUB Data Response 1.

Enclosed please find the Oregon Citizens' Utility Board's ("CUB") Data Response 1 to NW Natural in the above-referenced docket. Please do not hesitate to contact CUB with any questions.

DR 1 from NWN: Please refer to CUB/400, Jenks/14:4-5 ("CUB is not asking for the Commission to do so here."). Please confirm that CUB is not asking the Commission to evaluate NW Natural's CPP compliance strategy in docket UG 435.

Data Response 1: The quote NWN references indeed indicates that CUB is not asking the Commission to evaluate the entirety of NW Natural's CPP Compliance strategy in UG 435. However, the Company's own modeling demonstrates that CPP compliance costs will increase over time, including incremental energy efficiency costs beginning in the 2022-2023 window. *See* CUB/400/Jenks/13, Figure 1. Because these costs are being incurred within this proceeding's test year, it is appropriate to consider their impact on NW Natural's existing and new customers. CUB's recommendation to reduce and phase out the current residential Line Extension Allowance (LEA) over time is based on the premise that new customer growth brings an emissions reduction obligation and attendant CPP compliance costs. This is corroborated by the Company's own modeling. *See* CUB/400/Jenks/13, Figure 1. Further, there are flaws in the Internal Rate of Return model NW Natural uses to calculate its current LEA.

/s/ Michael P. Goetz

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of Zachary D. Kravitz

RENEWABLE NATURAL GAS AUTOMATIC ADJUSTMENT CLAUSE EXHIBIT 2500

July 20, 2022

EXHIBIT 2500 – SURREBUTTAL TESTIMONY – RENEWABLE NATURAL GAS AUTOMATIC ADJUSTMENT CLAUSE

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Are you the same Zachary Kravitz who filed Testimony in this proceeding on behalf of Northwest Natural Gas Company ("NW Natural" or the "Company")?

A. Yes. I presented NW Natural/1500, Kravitz and NW Natural/1600, Kravitz. Along with David Anderson, I also presented NW Natural/100, Anderson-Kravitz. In addition, I co-sponsored Joint Testimony Supporting the Multi-Party Stipulation Regarding Revenue Requirement, Rate Spread and Certain Other Issues, NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins and Kermode, and I co-sponsored Joint Testimony in Support of Second Partial Stipulation, NW Natural-Staff-CUB-AWEC-Coalition/100, Kravitz, Wyman, Fjeldheim, Scala, Jenks, Mullins, and Fain.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony is to respond to testimony filed on June 30, 2022, by the Public Utility Commission of Oregon Staff ("Staff"), the Oregon Citizens' Utility Board ("CUB"), and the Alliance of Western Energy Consumers ("AWEC"). I will respond to issues presented in the testimony of Staff witness Matthew Muldoon (Staff/1800, Muldoon), CUB witness William Gehrke (CUB/500, Gehrke), and AWEC witness Bradley Mullins (AWEC/200, Mullins).

Q. Please summarize your Surrebuttal Testimony.

A. In my Surrebuttal Testimony, I first summarize the parties' positions on the Company's proposed Schedule 198, which is an automatic adjustment clause ("AAC") designed to recover the costs of the Company's prudently incurred qualified investments in renewable natural gas ("RNG").[1] Second, I explain why the Company should be permitted to defer the costs between the in-service date of a new RNG qualified investment and the rate effective date. Third, I explain that this deferral should not be subject to an earnings test. Fourth, I briefly respond to CUB's concerns with allowing the Company to use a rate effective date other than November 1. Fifth, I explain why the Company should be permitted to defer the difference between forecasted and actual operating RNG costs. I also propose an alternative where the Company would only defer the revenues associated with the physical gas sales of its RNG projects. Finally, I address several other issues that the parties raised in Rebuttal Testimony, including the amortization period of deferrals and whether the AAC should apply to transport customers.

II. SUMMARY OF PARTIES' POSITIONS

Q. Please briefly summarize whether the parties to this proceeding support or oppose establishing an AAC for the Company's qualified investments in RNG.

A. Both Staff and CUB support establishing an AAC for the Company's qualified investments in RNG. Staff, CUB, and the Company, however, have differences on specific issues related to how the AAC is structured. In Direct Testimony, AWEC initially opposed an AAC.[2] In Rebuttal Testimony, it modified its position, stating that it "would not necessarily oppose an [AAC] that was designed to

[1] The term "qualified investments" is defined in ORS 757.392(5).

[2] AWEC/100, Mullins/43.

accommodate SB 98 projects,"[3] but that the AAC should not be used to assign Climate Protection Program ("CPP") compliance costs to transport customers.[4] Finally, Small Business Utility Advocates ("SBUA") and the Coalition[5] have not taken a position on the AAC.

Q. Despite their differences on specific issues, do Staff, CUB, AWEC, and the Company generally agree on the structure of the AAC?

A. Staff, CUB, and the Company generally agree on the structure of the AAC. Although it is somewhat unclear as to what AWEC would not oppose, aside from an earnings test for deferrals and only assigning costs to sales customers, it has not indicated that it opposes the following general structure in Rebuttal Testimony:

- All costs associated with RNG qualified investment will be tracked separately from base rates.
- NW Natural will include the projected revenue requirement associated with new RNG assets and will annually update the forecasted cost of previously approved RNG projects in rates on August 1st. Capital investments will be subject to recovery based on the undepreciated balance as of the rate-effective date.
- Prior to changing rates, NW Natural will attest that all RNG projects are currently operating and providing utility service to Oregon customers. If a

[3] AWEC/200, Mullins/16. SB 98 refers to ORS 757.390-398.

[4] *Id.*

[5] The Coalition is comprised of the Coalition of Communities of Color, Sierra Club, Verde, Climate Solutions, Oregon Environmental Council, Columbia Riverkeeper, and the Community Energy Project.

project is no longer producing and is retired while there is still undepreciated capital investment associated with the project, NW Natural will remove that project from its calculation of its return on rate base from the mechanism and will earn the time value of money on its undepreciated capital investment.[6]

- Once NW Natural expects to meet the cost cap in SB 98 (ORS 757.396(5)), it will meet to discuss changes to the AAC, and address how ratemaking should occur once the cost cap is reached.

Q. Please list the issues where there is still disagreement among the parties.

A. The parties do not agree on the following issues:

- Whether the Company can file for a deferral for the period between the in-service date of the RNG project and the rate effective date and, if so, whether that deferral should be subject to an earnings test.
- Whether the Company can add new RNG assets on a date other than November 1st.
- Whether the Company can file for a deferral for differences between forecasted RNG costs and actual RNG costs from year to year, and if so, whether that deferral should be subject to an earning test.

[6] In Reply Testimony (NW Natural/1600 Kravitz/35), the Company stated that the time value of money should reflect its cost of debt. After reviewing CUB's Rebuttal Testimony (CUB/500, Gehrke/21-22), NW Natural agrees with CUB that it is not necessary to determine how to measure the time value of money in this proceeding, as further explained in Section VII. Rather, this determination can be made if an RNG project is retired early.

III. DEFERRAL BETWEEN IN-SERVICE DATE AND RATE EFFECTIVE DATE

Q. Why does the Company continue to believe that it should be allowed to defer costs between an RNG project's in-service date and the rate effective date?

A. The Company continues to believe that such deferrals are appropriate to ensure that the AAC is fairly balanced between the Company and its customers. At the outset of filing the AAC, NW Natural proposed to set a specific date for rate changes associated with the AAC. NW Natural proposed November 1 because that date aligns with the Company's Purchased Gas Adjustment ("PGA") and it has historically been targeted as the rate effective date for the Company's general rate cases. NW Natural viewed its proposal as a sensible action to limit rate changes throughout the year. NW Natural also used the November 1 rate effective date to give stakeholders' certainty regarding the AAC filing process. Specifically, NW Natural proposed filing its application seeking Commission approval of new RNG projects by February 28, thereby setting a predictable annual process that would start no later than February 28 and conclude on November 1. Although the Company did also propose retaining some flexibility to change the rate effective date of November 1 if it demonstrated that it was in the public interest to do so, it fully expected to use that exception sparingly given the importance of minimizing the frequency of rate changes and providing certainty to stakeholders.

To provide this level of certainty for regulatory timing, the Company requested the ability to defer the cost of service for each project between the date the project was placed in-service and the rate effective date. This was an important feature to NW Natural because, without a deferral, it would not have an opportunity to recover the costs of its RNG investments between the in-service date and the rate effective date, and this issue was exacerbated by CUB's strong support for locking in a November 1 rate effective date with no exceptions.[7] As noted in Section V, NW Natural would be agreeable to CUB's proposal to prohibit any exceptions to the November 1 rate change if the Commission were to approve the use of deferrals between the in-service date and the rate effective date of RNG investments.

In addition to the considerations above, the ratemaking structure of NW Natural's proposal manages regulatory lag in a symmetrical fashion between the Company and customers. Under the Company's proposal, one element of regulatory lag is addressed by annually updating the accumulated depreciation balance in rate base, which under traditional ratemaking would only occur when the Company has a general rate case. In other words, when capital projects are approved in rate cases and established in the Company's rate base, that rate base is set until the next rate case, even though the capital projects are depreciating. Generally, this ratemaking approach is balanced because utilities then accept the regulatory lag on capital projects until such time as rate base is updated again. With the Company's AAC proposal, however, there is no anticipated regulatory lag in the Company's favor because the Company will annually reflect the depreciated rate base through the annual update to the cost of service. This treatment benefits customers because it reduces rates due to declining rate base more dynamically.

[7] *See* CUB/500, Gehrke/20-21.

Given this treatment, the Company also believes that it is appropriate to utilize symmetry in the ratemaking by reducing the regulatory lag between the project's in-service date and rate-effective date, which allows the Company the opportunity to fully recover its prudently incurred costs. Without this balance, the lack of a deferral would represent a systematic condition of under-recovery of a project's cost of service.

Q. CUB claims that its proposal, which would only allow the Company to annually update its costs, such as capital additions, rate base, O&M expense, and sales of the physical gas that the project produces, already reduces regulatory lag for both the Company and its customers, and that an additional deferral between the in-service date and the rate effective date would only benefit the Company.[8] How do you respond?

A. By seeking a deferral, the Company is only seeking the opportunity to recover prudently incurred costs. Without a deferral, the Company would not have the ability to demonstrate that these costs are prudent and should be included in rates, resulting in them not being recovered. Moreover, annually reducing depreciation expense for the life of the project is a clear benefit to customers, especially compared to a similar AAC for electric utilities—the Renewable Adjustment Clause—where renewable generating projects are only tracked separately until the

[8] *Id.* at 19-20.

electric utility has a general rate case where they are made part of base rates and there is no longer any annual update of costs.[9]

Q. CUB and Staff argue that NW Natural's deferral proposal results in dollar-for-dollar rate recovery that eliminates the Company's risk. Is that correct?

A. No. CUB's witness states that such a deferral "guarantee[s] revenue collection for utility between the commercial operation date and the rate effective date of facility."[10] Staff's witness makes a similar point, stating that "returns that 'AUTOMATICALLY' flow through to the Company have comparable risk to top rated corporate bonds and only slightly greater risk than U.S. Treasuries."[11] However, these statements do not reflect Commission precedent, which holds that all deferrals carry a risk of disallowance and that the Company is compensated for this risk by earning interest at the authorized rate of return prior to amortization.[12]

In seeking a deferral between the commercial operation date and the rate effective date of the facility, the Company is not seeking "guaranteed" or "automatic" cost recovery. Rather it is only seeking the opportunity to demonstrate that the costs incurred are prudent and, therefore, can be recovered in rates. These deferred costs carry the risk of disallowance, which is why Commission

[9] *See* e.g., PGE Schedule 122, Pacific Power Schedule 202.

[10] CUB/500, Gehrke/19.

[11] Staff/1800, Muldoon/25.

[12] *In re Public Utility Commission of Oregon*, Docket UM 1147, Order No. 05-1070 at 14 (Oct. 5, 2005); *In re Public Utility Commission of Oregon*, Docket UM 1147, Order No. 06-507 at 4 (Sep. 6, 2006). *See also In the Matter of Portland General Electric Company, Request for a General Rate Revision*, Docket UE 394, CUB's Response PGE's Motion for Clarification at 3, available at https://edocs.puc.state.or.us/efdocs/HAC/ue394hac141326.pdf (stating that this precedent is a "bedrock principle" of the Commission).

precedent states that deferrals earn interest at the authorized rate of return prior to amortization.[13]

Q. In seeking to limit deferrals, CUB claims that the Commission has interpreted ORS 469A.120(1) to limit deferrals. Do you believe that the Commission should rely on its interpretation of ORS 469A.120(1) in this proceeding?

A. No. The Commission has already interpreted SB 98 and should rely on that interpretation rather than applying a separate statute—ORS 469A.120(1). CUB cites Order No. 15-408, where the Commission interpreted ORS 469A.120(1).[14] In that order, however, the Commission explains that it uses "legislative intent" to determine the meaning of a statute.[15] In the case of SB 98, the Commission has already interpreted SB 98 and determined legislative intent. Specifically, in Order No. 20-227 where the Commission adopted SB 98 administrative rules, the Commission stated: "The legislature directed us, in ORS 757.394(3), to adopt rules to establish a process for natural gas utilities to *fully recover* the costs associated with a large or small renewable natural gas program. . . ."[16] Also, as I pointed out in my Reply Testimony, CUB, itself, stated that: "A plain reading of this language [SB 98] demonstrates that the Commission is mandated (i.e. 'shall') to adopt ratemaking mechanisms to ensure recovery of the utility's prudently incurred

[13] *Id.*

[14] CUB/500, Gehrke/12-13.

[15] *In the Matter of Portland General Electric Company and PacifiCorp dba Pacific Power, Request for Generic Power Cost Adjustment Mechanism Investigation*, Docket UM 1662, Order No. 15-408 at 6 (Dec. 18, 2015).

[16] *In the Matter of Rulemaking Regarding the 2019 Senate Bill 98 Renewable Natural Gas Programs*, Docket AR 632, Order No. 20-227 at 14 (July 16, 2020) (emphasis added).

costs."[17] This interpretation of SB 98 is very different from the Commission's interpretation of ORS 469A.120(1), where the Commission held that the "plain reading of the statute" only "allows the utilities the opportunity to recover their variable costs."[18] Instead of relying on a separate statute—ORS 469A.120(1)—the Commission should rely on its interpretation of SB 98, which is, of course, directly on point and requires the recovery of all prudently incurred costs. Moreover, under ORS 469A.120, which applies to costs incurred to meet Oregon's electric renewable portfolio standard, electric utilities are permitted to defer the costs between the in-service date of a renewable electric project and the rate effective date.[19] Therefore, ORS 469A.120, even if it did apply, is not a bar to the type of deferral that the Company is seeking here.

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[17] *In the Matter of Rulemaking Regarding the 2019 Senate Bill 98 Renewable Natural Gas Programs*, Docket AR 632, CUB Comments at 2 (April 27, 2020) (available at: https://edocs.puc.state.or.us/efdocs/HAC/ar632hac162912.pdf).

[18] *In the Matter of Portland General Electric Company and PacifiCorp dba Pacific Power, Request for Generic Power Cost Adjustment Mechanism Investigation*, Docket UM 1662, Order No. 15-408 at 6 (Dec. 18, 2015).

[19] PGE Schedule 122, Pacific Power Schedule 202.

Q. In opposing a deferral between the in-service date and the rate effective date, Staff states that it is illogical for the Company to argue both that: i) an AAC is needed "because general rate cases and deferrals are inadequate and too slow to ensure appropriate cost recovery," and ii) an AAC requires deferrals.[20] Do these statements made by the Company conflict?

A. Not at all. In Direct Testimony, I stated that the Company is proposing an AAC, in part, to "prevent[] the accumulation of substantial deferrals between general rate cases, which would be required in the absence of Schedule 198 to ensure that NW Natural recovers all of its prudently incurred costs."[21] By conducting annual AAC proceedings, deferral balances are less than they otherwise would be if the Company were only to use general rate cases to recover costs. However, the Company never stated that deferrals would be completely unnecessary if the AAC were adopted. Further, as stated above, such deferrals are used by electric utilities in conjunction with an AAC for renewable power projects.

Q. In its Rebuttal Testimony, Staff states that it wants to ensure that projects are in-service a month before the rate effective date.[22] Does this increase the need for a deferral between the in-service date and the rate effective date?

A. Yes. Without a deferral or the ability to time the rate effective date to coincide with the project's in-service date, Staff's proposal effectively guarantees that the

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[20] Staff/1800, Muldoon/24.

[21] NW Natural/1500, Kravitz/6.

[22] Staff/1800, Muldoon/21.

Company will under-recover the project's cost of service. NW Natural, however, recognizes Staff's desire to be certain that the project is in-service prior to the rate effective date. NW Natural would agree to this provision if a deferral between the in-service date and the rate effective date is approved.

Q. If the Commission precludes NW Natural from seeking to defer costs between the in-service date and the rate effective date, should the Commission allow the Company to have flexibility with the rate effective date for new projects?

A. Yes. If the Commission were to decide that deferrals are not appropriate or are otherwise subject to an earnings test proposed by AWEC that is less than the authorized rate of return (see Section IV below), then it would be appropriate for the Commission to not establish a fixed rate effective date for new RNG qualified investments (November 1). Rather, the Commission should allow the Company to appropriately time the AAC proceeding so that rates go into effect concurrent with the project in-service date or shortly thereafter. This position reflects the stance that the Company took in its Direct Testimony where it stated: "Absent a deferral, NW Natural would seek to include new qualified investments in rates when they enter service . . . ."[23]

[23] NW Natural/1500, Kravitz/11.

Q. Does the Company believe that timing the AAC proceeding so that rates go into effect concurrent with the project in-service date or shortly thereafter is preferable to a deferral?

A. No, it does not. The deferral minimizes the frequency of rate changes and eliminates the risk that there will be overlapping AAC proceedings for multiple RNG projects. If a deferral is permitted, projects can be grouped together in a single proceeding while still giving the Company the opportunity to recover its prudently incurred costs between the project's in-service date and the rate effective date. While allowing the Company to time the rate effective date to coincide as closely as possible to the project's in-service would obviate the need to have a deferral or an earnings test, it would likely result in multiple changes in a year and a less streamlined process.

Q. Did the Company state in Direct Testimony that it would be difficult to ensure that its RNG projects enter service shortly before the rate effective date?

A. No. The Company was concerned about timing all of its RNG investments to enter service shortly before the proposed November 1 rate effective date.[24] While a deferral is a better approach for the reasons stated above, the Company could work to ensure that rates go into effect concurrent with the project in-service date or shortly thereafter, so long as it has flexibility to determine the rate effective date.

[24] *Id.*

IV. EARNINGS TEST FOR THE DEFERRAL BETWEEN THE IN-SERVICE DATE AND RATE EFFECTIVE DATE

Q. AWEC continues to argue that any deferral between the in-service date and the rate effective date should be subject to an earnings test that is 100 basis points below the Company's authorized rate of return.[25] Why is this treatment inappropriate?

A. The Company continues to believe that an earnings test set at 100 basis points below its authorized rate of return is unreasonable and inconsistent with SB 98, which is meant to incentivize the acquisition of RNG by allowing natural gas utilities to recover all prudently incurred costs, including "the cost of capital established by the commission in the large natural gas utility's most recent general rate case."[26] If such an earnings test were adopted, NW Natural would lose the opportunity to recover its prudently incurred costs unless it was significantly under-earning. Such an earnings test would be contrary to SB 98, which does not condition the opportunity to recover prudently incurred costs on whether NW Natural is significantly under-earning. Instead, as stated by AWEC in a separate proceeding, "The law [SB 98, including ORS 757.394 and ORS 757.396] is clear that utilities will be able to recover all prudently incurred cost associated with an RNG program."[27] Furthermore, SB 98 requires that the Company recover "the cost of

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[25] AWEC/200, Mullins/17-19.

[26] ORS 757.396(3).

[27] NW Natural/1600, Kravitz/37 (citing *In the Matter of Rulemaking Regarding the 2019 Senate Bill 98 Renewable Natural Gas Programs*, Docket AR 632, AWEC Comments at 2 (Apr. 27, 2020) (available at: https://edocs.puc.state.or.us/efdocs/HAC/ar632hac123649.pdf)).

capital established by the commission in the large natural gas utility's most recent general rate case,"[28] which it would not have the opportunity to do if AWEC's proposal were adopted. Finally, per ORS 757.259(5), the Commission is not obligated to impose an earnings test on a deferral subject to an automatic adjustment clause.

Q. In supporting AWEC's proposed earnings test, Staff claims that the Company's RNG investments are less risky than other investments. Is that true?

A. No. Staff is conflating deferrals with cost recovery. As stated above, Commission precedent provides that any deferral that it authorizes earn interest at the Company's authorized rate of return because such amounts are subject to disallowance.[29] It would be anomalous for the Commission to simultaneously hold that: 1) it is appropriate for utilities to earn interest at their authorized rate of return because such amounts are subject to disallowance and 2) an earnings test should be imposed because the utility's risk of a disallowance is actually "much lower and near [the] cost of incremental long-term debt."[30] Both statements cannot be true. NW Natural believes that the Commission should adhere to its prior precedent and permit the Company to recover deferrals at its authorized rate of return prior to amortization.

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[28] ORS 757.396(3).

[29] *In re Public Utility Commission of Oregon*, Docket UM 1147, Order No. 05-1070 at 14 (Oct. 5, 2005); *In re Public Utility Commission of Oregon*, Docket UM 1147, Order No. 06-507 at 4 (Sep. 6, 2006).

[30] Staff/1800, Muldoon/24.

Q. Does the Company believe that any earnings test is warranted?

A. No. Again, by seeking this deferral, the Company is only seeking the opportunity to recover its prudently incurred costs, as provided for in SB 98, and SB 98 does not condition the recovery of prudently incurred RNG costs on the Company under-earning by a certain amount. Moreover, subjecting the Company to an earnings test that is less than the authorized rate of return, as proposed by AWEC, creates barriers to decarbonization rather than removes them. If the Commission, however, believes that an earnings test is appropriate, then it should be set at 100 basis points above the Company's authorized rate of return. This proposal is more consistent with SB 98, as well as state policy in general, that promotes the acquisition of RNG and ensures the recovery of those prudently incurred costs while also addressing customers' concerns regarding cost recovery.

Q. If, notwithstanding the Company's arguments to the contrary, the Commission nonetheless were to determine that an earnings test that is less than the Company's authorized rate of return should be implemented, would the Company request that it be given the flexibility to time the rate-effective date to the in-service date?

A. Yes. If, over the Company's arguments to the contrary, the Commission were to believe that such an earnings test is appropriate, then the Company would request the option to have flexibility to time the rate effective date so that it coincides with the in-service date of its RNG investments in order to minimize deferrals. This treatment would give the Company the opportunity to recover all of its prudently incurred costs. However, as explained above, it would also lead to multiple rate changes in a year and the potential for overlapping AAC proceedings for multiple RNG projects.

V. RATE EFFECTIVE DATE FOR NEW RNG PROJECTS

Q. Please summarize CUB's Rebuttal Testimony regarding whether the Company should be permitted to demonstrate that it is in the public interest to use a rate effective date other than November 1 for new RNG projects.

A. As stated above, CUB strongly supports a fixed November 1 rate effective date for new RNG projects.[31] In response to the Company's testimony that its other rate changes may not take place on November 1 and, therefore, the AAC could have the unintentional effect of leading to multiple rate changes in a year, CUB stated that these circumstances are unlikely to occur.[32]

Q. How do you respond to CUB's Rebuttal Testimony?

A. NW Natural appreciates CUB's position. The Company is willing to forgo any adjustment to the November 1 date if it can: 1) obtain a deferral for the period between the in-service date of the RNG project and the rate effective date (see Section III above), and 2) that such a deferral is not subject to an earnings test similar to AWEC's proposal that is less than the Company's authorized rate of return (see Section IV above). While this rigidness in timing could have drawbacks for customers (i.e., larger initial deferral balances), given CUB's strong opposition

[31] CUB/500, Gehrke/20-21.

[32] *Id.*

to changing the rate effective date,[33] the Company no longer plans to pursue that option subject to the two qualifications above.

VI. DEFERRAL FOR DIFFERENCES BETWEEN FORECASTED RNG COSTS AND ACTUAL RNG COSTS

Q. Did NW Natural originally propose that it be allowed to defer the differences between forecasted and actual RNG costs?

A. Yes. NW Natural proposed that it be allowed to defer the differences between forecasted and actual RNG costs in order to ensure that it has the opportunity to recover all of its prudently incurred costs.[34] Under NW Natural's proposal, the deferral would not be subject to an earnings test per ORS 757.259(5).

Q. Did all the parties support NW Natural's proposal?

A. No. AWEC opposes such a deferral entirely, stating that "[t]ruing up the investment costs through a deferral is not necessary to provide NW Natural with recovery of investments in RNG facilities."[35] Staff and CUB, however, agree that NW Natural should be permitted to defer these costs subject to an earnings test. Staff states that "[f]or true-up between forecast and actuals, [it] recommends a deadband of +/- 50 basis points to incent the company to operate efficiently."[36] CUB states that its "earning test eliminates any annual RNG cost adjustment if the Company

[33] *Id.*

[34] NW Natural/1500, Kravitz/12.

[35] AWEC/100, Mullins/42.

[36] Staff/1800, Muldoon/22.

earn[s] within a one hundred basis points deadband around its allowed return on equity (ROE)."[37] SBUA and the Coalition did not take a position on this issue.

Q. Has NW Natural responded to AWEC's opposition in Reply Testimony?

A. Yes. In Reply Testimony, the Company stated that the deferral would allow it to recover the difference between forecasted and actual costs in rates, as well as the difference between forecasted and actual revenues received for recovery.[38] Such treatment is especially important for selling the physical gas the project produces while retaining the environmental attributes to meet ORS 757.396 targets and CPP compliance.[39] The market price of such gas is variable and outside of the Company's control, so truing up these costs makes sense.[40]

Q. Does the Company support Staff's or CUB's proposed earning tests?

A. No. Staff's rationale for an earnings test is that it would incentivize the Company to operate efficiently, but the Company already has an incentive to operate efficiently. Namely, it must demonstrate that it is acting prudently under ORS 757.394 and ORS 757.396 to recover its costs. As stated above, contrary to Staff's and CUB's assertions, cost recovery is neither "automatic" nor "guaranteed." Rather, deferred amounts, like any other RNG cost, are reviewed for prudency and are at risk of disallowance, which is why they earn interest at the utility's authorized rate of return. CUB's assertion that the Commission should impose an earnings

[37] CUB/500, Gehrke/9.

[38] NW Natural/1600, Kravitz/40.

[39] *Id.*

[40] *Id.*

test based on an entirely different and inapplicable statute—ORS 469A.120(1)—and not SB 98 is similarly misplaced, as explained in Section III above.

Q. Besides an earnings test, is there another way to address the parties' concerns?

A. Yes. NW Natural has developed an alternative that it believes should be workable for both the Company and the parties. Rather than subjecting the deferral to an earnings test that would only trigger if the Company were under-earning or over-earning to a very significant degree, the Company would only seek to defer the difference between the forecasted and actual revenues of the physical gas sales from its RNG projects.[41] The Company would not defer any other differences between forecasted and actual costs or revenues.

Q. Under this alternative proposal, would the true-up of physical gas revenues be subject to an earnings test?

A. No. By only deferring physical gas revenues and not any other difference between forecasted and actual costs or revenues, the Company believes it has addressed Staff's underlying reason for proposing an earnings test, which is that the Company should be incentivized to operate efficiently. Under NW Natural's alternative, the Company would bear the risk of any differences between forecasted and actual cost or revenues, except for physical gas sales where the Company does not control the market price. The Company also believes that its alternative addresses

[41] For RNG projects, such as Lexington, the Company sells the physical gas the project produces to third parties. This revenue offsets the cost that customers pay for the project. The Company retains the environmental attributes of the RNG to meet ORS 757.396 targets and CPP compliance.

CUB's concern regarding NW Natural bearing a certain amount of risk for its RNG investments. NW Natural would bear all of the risk of the difference between forecasted and actual costs, except, again, for physical gas revenues. NW Natural also notes that this treatment is not one-sided in favor of the Company. Customers would benefit from any physical gas sales revenue that is greater than forecasted. Additionally, over the life of a project, revenue from these sales would be expected to increase, and this proposal would secure those revenues for customers each year. In periods of market volatility, the Company and customers would not gain or lose based on the Company's forecast of a cost that is outside of the Company's control. Finally, the Company has attempted to address AWEC's concern by largely eliminating the annual true-up, except for physical gas revenues for the reasons explained above.

Q. In making this proposal, is the Company abandoning its argument that SB 98 allows it to recover all prudently incurred costs?

A. No. The Company continues to maintain that the plain meaning of SB 98 is clear—it permits natural gas utilities to recover all prudently incurred costs. However, the Company does not believe that SB 98 somehow prevents it from proposing pragmatic solutions that can hopefully address the parties' needs, as well as the Company's. It also would be inappropriate for others to use the Company's good-faith efforts in finding workable solutions against it, by arguing that the Company has somehow conceded that SB 98 does not mean what it says. Rather, the Company is merely attempting to respond to parties' concerns in a constructive fashion.

VII. OTHER ISSUES

Q. In its Rebuttal Testimony, AWEC argues that NW Natural should not use the AAC to recover CPP compliance costs.[42] What is your response?

A. NW Natural continues to believe that all customer classes, except storage customers, should be allocated costs under the AAC. NW Natural is the point of regulation for all of its non-storage customers under the CPP. Therefore, these customers benefit from the Company's acquisition of RNG.[43] However, for each new RNG qualified investment under the AAC, the Company will maintain the flexibility to propose how to allocate costs across customer classes in its initial filing.[44] Rate spread issues are further addressed in the Surrebuttal Testimony of Kyle Walker and Rob Wyman (NW Natural/3000, Walker-Wyman).

Q. AWEC states that a one-year amortization period for any deferrals under the AAC is not reasonable.[45] What is your response?

A. To the extent that deferrals are utilized, the Company recommends it has the flexibility to propose amortization periods on a case-by-case basis. There may be instances where a one-year amortization period is appropriate, and there also could be instances where a longer amortization period is warranted.

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[42] AWEC/200, Mullins/16.

[43] *See* NW Natural/1500, Kravitz/13.

[44] *Id.*

[45] AWEC/200, Mullins/18-19.

Q. In Rebuttal Testimony, CUB proposes to delay determining how to measure the time value of money if an RNG facility retires while there is still undepreciated capital investment associated with the project.[46] Does the Company agree with CUB?

A. Yes. NW Natural agrees with CUB that this is a minor issue regarding a situation that may never occur and that such a delay would be appropriate.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

[46] CUB/500, Gehrke/21-22.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of John D. Taylor

LINE EXTENSION POLICY
EXHIBIT 2600

July 20, 2022

EXHIBIT 2600 - SURREBUTTAL TESTIMONY – LINE EXTENSION POLICY

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.

A. My name is John D. Taylor, and I am employed by Atrium Economics, LLC ("Atrium Economics" or "Atrium") as a Managing Partner. My business address is 10 Hospital Center Commons, Suite 400, Hilton Head Island, SC 29926.

Q. Did you previously submit testimony in this proceeding on behalf of Northwest Natural Gas Company ("NW Natural" or "the Company")?

A. Yes. I presented Reply Testimony NW Natural/1800, Taylor, on June 6, 2022.

Q. What is the purpose of your Surrebuttal Testimony?

A. This Surrebuttal Testimony responds to certain portions of the Rebuttal Testimony submitted by other parties relating to their recommendation to eliminate the Company's Line Extension Allowance ("LEA"). Specifically, my Surrebuttal Testimony addresses the testimony of the following individuals:

- Rebuttal Testimony of Bob Jenks (CUB/400, Jenks) on behalf of the Oregon Citizens' Utility Board ("CUB"); and
- Rebuttal Testimony of Ed Burgess (Coalition/500, Burgess) on behalf of Intervenors Coalition of Communities of Color, Sierra Club, Verde, Community Energy Project, Columbia Riverkeeper, Climate Solutions, and Oregon Environmental Council (collectively, the "Coalition").

Q. Did the testimony of CUB witness Jenks or Coalition witness Burgess cause you to change your position on the appropriateness of the Company's Line Extension Allowance?

A. No. As I demonstrated in my Reply Testimony, and as I reiterate and further support in this Surrebuttal Testimony, the Company's current line extension allowance and policies, as contained in the Company's Schedule X tariff, are appropriate.

Q. Please summarize your principal conclusions.

A. First, I have concluded this docket is not an appropriate venue for the arguments CUB and the Coalition are making related to their recommendations to eliminate the LEA. Their proposals to eliminate the LEA due to compliance with the Climate Protection Program ("CPP") and concerns relating to the useful life of utility assets raise larger policy issues that should be addressed in a separate proceeding and not in this general rate case. This position is consistent with Staff's recommendations made in Rebuttal Testimony, stating: "Staff recommends the Commission find that the issues raised by the Coalition and CUB are complex matters applicable to all natural gas utilities, and more appropriately handled in a separate docket."[1] Similarly, the Alliance of Western Energy Consumers ("AWEC") stated in its Rebuttal Testimony: "The policy around line extensions is being discussed in the Natural Gas Fact Finding proceeding, UM 2178, and implicates Oregon customers and other gas utilities in Oregon. In my view, broader

[1] Staff/1800, Muldoon/26.

policy issues should be decided before a specific policy is implemented in a rate case."[2] The current LEA, which has been in place for a decade, is an appropriate tool to ensure fairness and equity between new customers paying to access the gas system and existing customers benefitting from new customers joining the system. Nothing in either CUB's or the Coalition's testimony suggests that the previously established balance should change.

My responses to specific points raised by CUB and the Coalition include:

- When a new customer's connection costs exceed the LEA, they are responsible for contributing the remaining balance. Assigning cost responsibility to the new customer for connection costs above the LEA prevents any cross-subsidies from existing customers to new customers.
- Eliminating the LEA, as recommended by CUB and the Coalition, simply results in new customers providing a subsidy to existing customers, where new customers pay 100 percent of their connection costs, and existing customers benefit from the revenue from these new customers that cover common costs of existing customers.
- Investments and expenses related to CPP compliance are driven by the total greenhouse gas ("GHG") reduction requirements and the economics of all compliance projects. They are not directly related to any single customer being added to the system. Therefore, it is not appropriate to

[2] AWEC/200, Mullins/19.

attempt to calculate compliance costs caused by a specific customer to be paid by direct assignment.

- Based on well-established cost causation principles, CPP compliance costs should be allocated to all customers. Attempting to curb gas system growth by imposing CPP compliance costs as upfront charges contradicts this fundamental regulatory principle and creates interclass and intergenerational equity issues.
- Changing the assumptions on useful life and term of the investment analysis, as suggested by CUB, increases the justifiable LEA, rather than decreases it.
- Customers are price sensitive and will respond to changes to the LEA that increase the costs to connect to the Company's distribution system. This opinion is supported by the experience of NW Natural and basic economic principles.
- If reductions to the LEA result in fewer customers joining the gas system, existing customers will pay higher rates, likely resulting in accelerated customer attrition. In this way, CUB's and the Coalition's concerns about stranded assets can become a self-fulfilling prophecy.

Q. How is the remainder of your Surrebuttal Testimony organized?

A. In Section II, I address specific points made by CUB witness Bob Jenks related to NW Natural's line extension policy. In Section III, I address the positions of Coalition witness Ed Burgess related to NW Natural's line extension policy.

Q. Are you sponsoring any exhibits with your Surrebuttal Testimony?

A. Yes, I am sponsoring NW Natural/2601, Taylor and NW Natural/2602, Taylor, as presented in the following table.

Table 1 – Surrebuttal NW Natural Exhibits

NW Natural/2601, Taylor	Updated Investment Analysis for Residential Line Extension Allowance – 30-year
NW Natural/2602, Taylor	Updated Investment Analysis for Residential Line Extension Allowance – 20-year

II. RESPONSE TO CUB WITNESS BOB JENKS

Q. CUB claims the Company is trying to expand a narrow issue germane to this proceeding into a larger policy debate and recommends the Commission should act on the line extension allowance in this proceeding.[3] How do you respond to this claim?

A. I disagree. The basis for CUB's and the Coalition's recommended elimination of the LEA is their perception of risks that are specific to concerns about NW Natural's ability to comply with the CPP and customer attrition due to what they see as the increasing popularity of electric heat pumps. These broad arguments submitted by CUB and the Coalition are outside the bounds of typical line extension allowance reviews that occur in general base rate proceedings. CUB's and the Coalition's arguments require broader policy and energy industry considerations. While general base rate proceedings are the appropriate forum to review a utility's line extension allowance, doing so by ignoring standard methods of determining

[3] CUB/400, Jenks/14.

an appropriate allowance and citing business model challenges,[4] claiming an inability of the gas system to comply with CPP compliance,[5] and speculating about customer attrition[6] is not a typical or appropriate approach.

CUB's and the Coalition's arguments are not germane to this proceeding, and in any event, they raise broader policy and energy industry considerations. The economic- and emissions-related analyses and arguments made by CUB and the Coalition relating to NW Natural's line extension allowance look at the gas system in isolation. Any legitimate assessment also needs to include costs, rate impacts, and emission impacts associated with replacing natural gas with the electricity needed to serve future aggregate energy demand. It also needs to consider logistical challenges, limitations, and realities associated with building out the electric system at what is likely to be an unprecedented magnitude and cost. Identifying the best path to achieve state emissions goals and CPP compliance requires a broader, combined gas/electric resource planning effort to draw meaningful conclusions.

[4] CUB/100, Jenks/2-11.

[5] *Id*. at 4 & 14.

[6] *Id*. at 6.

Q. In his Rebuttal Testimony, Mr. Jenks clarified that he is not advocating that his LEA proposal was intended to allow NW Natural to recover its CPP compliance costs from new customers as an upfront charge.[7] Could you please respond?

A. I was quite surprised to see that statement in Mr. Jenks's Rebuttal Testimony given that in his Opening Testimony, he clearly advocated that CPP costs be "incorporated into" the new customer's LEA, yielding a negative charge.[8] In my Reply Testimony, I pointed out that this proposal resulted in double recovery of CPP compliance costs from new customers, given that they would need to pay their pro rata share of compliance costs first through the LEA and second through their volumetric charges over the life of their service. Mr. Jenks is now clarifying his position by explaining that "because a new customer brings incremental CPP compliance costs that increase costs to new customers, there is no longer a justification to subsidize the customers' connection to the system."[9] However, I am not certain I understand the difference. As I have discussed, all CPP costs, including those associated with the increased load represented by new customers, will be recovered in volumetric charges—which assure that new customers pay their fair share of compliance costs. Given this fact, the offset to the LEA is either intended as a second recovery of compliance costs from new customers or it is

[7] CUB/400, Jenks/30.

[8] CUB/100, Jenks/17.

[9] CUB/400, Jenks/30.

simply a penalty designed to dissuade new customers from joining the system. Either way, the approach is inappropriate.

Q. Did CUB or the Coalition update the inputs to the investment analysis that NW Natural used to determine the current LEA to reflect their preferred assumptions to develop an alternative LEA?

A. No. While both CUB and the Coalition raise concerns with the Company's investment analysis on which the current allowance is based, rather than replace the inputs and adjust the assumptions of the analysis, they simply state it is incorrect and recommend a full elimination of the allowance.[10] CUB proposes to eliminate the LEA after an initial phase-in period through 2023, during which the LEA would be based on five years of margin,[11] while the Coalition would eliminate the LEA immediately.

Q. How do you respond to CUB's recommendation to use five years of margin to estimate an appropriate line extension allowance for 2023?

A. CUB states that they are recommending using five years of margin and use per customer of 593 therms to develop their recommended line extension allowance for 2023 of $2,200.[12] CUB believes the investment analysis used in the 2012 rate proceeding to develop the line extension allowance (updated in my Reply Testimony to reflect current costs and revenues), is flawed[13] and recommends

[10] CUB/400, Jenks/11.

[11] *Id*.

[12] *Id.*

[13] *Id.* at 34.

"returning to prior methodology," by "limiting the LEA to 5 years of margin revenue."[14] However, CUB provides no support as to why five years of margin is the correct multiple of margin. In contrast, the Company has presented an analysis that shows an appropriate revenue multiplier with a time horizon of 30 years would be 8.2,[15] while an appropriate multiplier for a shorter time horizon of 20 years would be 6.93.[16] These analyses presented in my Reply Testimony also use a lower use per customer (i.e., 532 therms) than CUB's five years of margin analysis.[17] CUB's starting point of evaluating an LEA based on five years of margin is not substantiated or supported by their testimony.

Q. Does CUB provide testimony on the relationship between adding new customers and recovering fixed costs over a larger customer base?

A. Yes. CUB recognizes there is a benefit to existing customers through the sharing of joint and common costs and underscores the importance of setting an LEA to ensure these benefits are not impaired, stating: "The purpose of a Line Extension Allowance is to look at the projected load of the new customer and, based on that load, set a cap on what share of the interconnect costs can be borne by the utility's other customers without impairing the benefit from sharing joint and common costs. So new customers only benefit the system if the LEA is properly set."[18] This

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[14] *Id.* at 33.

[15] NW Natural/1800, Taylor/18.

[16] *Id.* at 34.

[17] *Id.*

[18] CUB/400, Jenks/14.

view is not in conflict with the Company's position that the purpose of the line extension allowance is "to ensure equity between existing and new customers, where existing customers are held harmless by not paying for the portion of new service costs that are uneconomic yet benefit from the incremental revenues in excess of the cost related to the new customer's service, which contributes to paying for common costs."[19] Thus, the conflict between the Company's and CUB's position is not the purpose or role of the line extension allowance but rather the method to ensure it is properly set.

Q. CUB takes the position that, "[a]s long as the LEA subsidy is so much greater than the customer charge, it is better for ratepayers for existing customers to reduce load by avoiding new customers, rather than reducing demand."[20] How do you respond?

A. I disagree. As an initial matter, I take issue with CUB's use of the word "subsidy" to describe an LEA. This term is particularly inapt, given that the purpose of an LEA is to ensure that existing customers do not subsidize current customers and vice versa. Moreover, CUB's conclusion is based on an illogical and flawed analysis. Specifically, in developing support for this conclusion, CUB is comparing the revenues from NW Natural's residential customer charge at $8.00/month to the line extension allowance of $2,875, stating that "[i]t would take 30 years for the customer charge to equal the LEA subsidy[.]"[21] However, the customer charge is

[19] NW Natural/1800, Taylor/6.

[20] CUB/400, Jenks/15-16.

[21] *Id*. at 15.

not, alone, the correct point of comparison. NW Natural's customers are also charged a volumetric base margin rate, so only considering the customer charge ignores all revenues from a customer that are recovered through the volumetric rate. The appropriate calculus of comparing revenues to the LEA would be to compare total revenues, costs of attaching the new customers, incremental costs, and account for the time value of money and depreciation of the rate base. This is exactly what NW Natural's LEA investment analysis does. While CUB may prefer to ignore the majority of revenues recovered from new customers to test the reasonableness of the LEA, doing so is unreasonable and an inaccurate depiction of expected revenues.

Q. How do you respond to CUB's position that eliminating the LEA does not create a substantive barrier to customers choosing to use natural gas?

A. I do not agree. First, the purpose of an LEA is not to increase or decrease the barrier to homeowners using gas but rather to ensure fairness between existing and new customers. Whether or not the elimination of the line extension allowance would deter customers from using gas should not be considered in setting an appropriate line extension allowance. Regardless of these considerations, the facts support the opposite conclusion—eliminating the LEA increases the cost to new customers of using natural gas for their residences and businesses, resulting in an incremental barrier to adopting gas services.[22] This is not speculation but a demonstrated economic principle—if the cost of a product or service increases,

[22] NW Natural/1800, Taylor/44.

certain customers will no longer choose to consume that product or service, reducing the quantity sold.[23] This fact is further detailed in the Surrebuttal Testimony of Company witnesses Heiting and Bracken, who explain that housing developers are sensitive to initial costs and choose not to connect to the gas system when they view NW Natural's LEA to be insufficient, rendering their project uneconomic.[24] Moreover, the developers of higher end housing will likely be more willing to pay the full cost of connecting to the gas system than developers of more moderate and lower-priced housing. This fact creates an unnecessary and unsubstantiated inequity in the marketplace where higher-income households can execute their preferences, and lower-income households cannot. Having a reasonable LEA ensures equity amongst all customers, both high-income and low-income, such that the amount of allowance is in proportion to their use and revenues generated, not that wealthy households can connect but low-income households cannot.

Q. Are there similar concerns with commercial and industrial customers?

A. Yes. Larger, more capitalized commercial customers may be able to execute their preference for natural gas more easily than small businesses with limited access to capital. A national pizza company may have no problem paying for the full cost of accessing the natural gas distribution system. In contrast, a locally-owned

[23] To what degree and how much this occurs is measured by the price elasticity of demand. The price elasticity of demand is the percentage change in the quantity demanded of a product or service divided by the percentage change in the price.

[24] NW Natural/2400, Heiting-Bracken/17.

smaller company may have less capital to spend on connections. Depending on the importance of fuel as an input to an industrial customer's cost of production, they may choose to look at other jurisdictions or service areas due to the higher cost of connecting a new facility in NW Natural's territory.

Q. How do you respond to CUB's statement that the line extension allowance contributes to the Company's earnings and "that the return on equity that shareholders earn from LEA investments is significant enough that the company would want to retain them"?[25]

A. A regulatory outcome should not be judged based on whether an investment opportunity exists, but rather, on whether the investment benefits customers and society. It is fundamental to the regulatory compact for a rate-regulated utility that a genuine opportunity to achieve a fair rate of return is afforded to the utility.

Q. Does CUB's proposal to eliminate the LEA align the interest of shareholders, existing customers, and new customers?

A. No. CUB's position misaligns the interest of shareholders, existing customers, and new customers by eliminating the LEA and requiring new customers to pay 100 percent of their connection costs. Under CUB's proposal, the Commission would need to consider whether existing customers should be afforded the opportunity to benefit from the addition of new customers if those new customers paid for 100 percent of their connection costs. The way to grapple with this, and the principal approach behind line extension policies across North America, and historically in

[25] CUB/400, Jenks/19.

Oregon,[26] is to set an LEA that considers the costs and benefits of adding these new customers and then requiring new customers to pay for connection costs above the allowance.

Q. CUB states that "[t]he Commission should not be persuaded by NWN's speculative testimony regarding what the investment community may do if CUB's proposal is adopted."[27] Please respond.

A. I disagree with CUB's view. While any single issue may not have a signaling effect to the investment community, the results of this proceeding could influence the investment community's views of Oregon's regulatory environment and the health of NW Natural's finances. While CUB may feel that NW Natural's testimony is speculative, as stated earlier, a reduction to or full elimination of NW Natural's LEA will impact customer growth and the ability of NW Natural to add economically viable customers. This is the exact type of regulatory outcome that the investment community reviews when evaluating investment risk. Further, investors expect the Company to earn a return on its invested capital.

Q. Does CUB's Rebuttal Testimony present any additional evidence related to the connection between CPP compliance costs and the LEA?

A. No. As noted above, CUB's economic rationale for phasing out the LEA is premised on incorporating CPP compliance costs into the Company's LEA

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[26] This principled approach is plainly set out in OAR 860-021-0051, which states: "Each gas utility shall develop, with the Commission's approval, a uniform policy governing the amount of main extension which will be made free to connect a new customer. This policy should be related to the investment that can prudently be made for the probable revenue."

[27] CUB/400, Jenks/21.

calculation, while also acknowledging these same costs are "system costs that are recovered from the customers on a system basis[.]"[28] My Reply Testimony characterized this approach as double counting, because under CUB's proposal, new customers are responsible for 100 percent of compliance costs when evaluating an economically viable LEA and pay these same costs as system costs during the duration as a customer.[29] CUB's Rebuttal Testimony claims that this approach is not double counting.[30] While CUB may not see their approach as double counting, their method requires customers to pay the average cost of compliance through rates and places 100 percent of their compliance cost on new customers when evaluating the appropriate level of the LEA. Regardless of whether CUB's proposal is characterized as double counting, duplication, or doubling costs, the proposal by CUB is illogical and it unfairly penalizes new customers.

Q. Please further explain why you believe that CUB's approach is illogical.

A. CUB states that since additional compliance costs are assigned to all customers, "it is necessary to reconsider whether the current LEA does what it is intended to do: ensure that growth of the system benefits customers as a whole."[31] CUB's argument is to limit the line extension allowance to 5 years of margin, which they

[28] *Id.* at 23.

[29] NW Natural/1800, Taylor/28.

[30] CUB/400, Jenks/25.

[31] *Id*. at 24.

equate to $2,200.[32] CUB then states that everyone has to pay for CPP compliance, so it is important to ensure the line extension allowance is fair.[33] To test if it is fair, CUB then puts 100 percent of the costs on the new customers for their compliance over the life of the new customer.[34] This approach is explicitly shown in Table 1 of CUB's Opening Testimony, as shown below.[35]

Table 1

Cost Associated with a Single New Customer	Cost	Years of Margin
GHG Reductions	$4519 - $5648	11 - 14
Line Extension Allowance (LEA)	$2,875	7
Financing cost of LEA	$1,907	5
total	$9300 -$10430	23 - 26 years

This approach does not make sense. On the contrary, if one were to accept this approach, you need to wrestle with the issue of doubling costs—placing 100 percent of the costs on new customers when evaluating the appropriate level of the LEA, resulting in no allowance, and then requiring them to pay their share of the average CPP compliance cost as existing customers.

Q. How does this approach unfairly penalize new customers?

A. Under CUB's approach, existing customers pay the average costs of compliance that occur over the life of being a customer, whereas new customers would be burdened on day one with 100 percent of their compliance costs in determining what they should pay for when connecting to the system. This is at best unfair,

[32] *Id*. at 11.
[33] I*d.* at 24.
[34] *Id*. at 24.
[35] *Id*. at 12.

and at worst, represents discriminatory pricing between customers. I fail to understand why existing customers should benefit from shared average costs when new customers would not, particularly when investments and expenses related to CPP compliance are driven by the total GHG reduction requirements and the economics of all compliance projects and are not directly related to any single customer being added to the system. Moreover, as noted above, new customers would pay the CPP compliance costs again through their volumetric rates over the life of their service.

Q. How do you respond to CUB's position that gas consumption associated with new customers' emissions must be fully decarbonized?[36]

A. CUB is confusing different types of costs. While meters and services are incremental costs directly attributable to new customers, the overall costs of CPP compliance are driven by GHG reduction requirements and the economics of all compliance projects. They are not directly related to any single customer being added to the system. It is unreasonable to treat common costs (i.e., CPP compliance costs) as incremental costs directly attributable to one customer. This rationale would also be the case for other investments made by the utility to enhance customer service, increase the productivity of its employees, replace or enhance its billing system, or any other common costs incurred by the Company. It would be unreasonable to directly attribute these costs to only new customers

[36] *Id*. at 24.

when they are common costs of providing utility distribution services to all customers.

Another concern raised in my Reply Testimony, but not addressed in CUB's Rebuttal Testimony, is that the estimated margin used by CUB to develop forecasted revenue attributable to new customers does not contain revenues associated with CPP compliance costs. It is erroneous to include costs but not revenues associated with paying for these costs. One can only imagine the economically inefficient decisions that competitive market participants would make if this were done when evaluating new projects. For example, assume an investor were to evaluate the purchase of a new office building and was planning to incur costs associated with a buildout to move from Class C to Class A lease rates. Imagine further that the investment analysis included the costs for the buildout but excluded the additional revenues from higher rates for the Class A offices. The result of excluding the higher lease rates is that the allowance for the purchase (i.e., funds the investor can economically allocate to this project) would be lower under these assumptions. As a result, the investor would make an economically inefficient decision based on including costs, but not incremental revenues associated with those costs.

Q. CUB recommends the Commission grant its proposal to eliminate the LEA in this docket "in alignment with its prior practice of examining an LEA in a [general rate case]."[37] How do you respond to this statement?

A. It is hard to believe that the methods employed by CUB to evaluate the appropriateness of NW Natural's line extension policy align with this Commission's prior practice of examining an LEA in a general rate case. This is because the cornerstone of CUB's argument is to place 100 percent of CPP compliance costs on new customers—costs that have not been in existence up to this point, and costs that could not be under review by this Commission in past general rate cases. CUB's approach to CPP compliance costs and their erroneous conclusion to eliminate the LEA is not in alignment with prior practices of this Commission.

Q. How do you respond to CUB's concern that future stakeholders could provide evidence to this Commission relating to assets being used and useful in the future?[38]

A. CUB is speculating on future outcomes concerning the used and usefulness of the future gas system. I believe that this Commission would be ill-advised to determine the fairness of a current policy based on this type of speculation. The energy industry is transitioning, but it is pure speculation to presuppose that the gas system will be less used and useful in the future than it is currently, particularly as local distribution companies explore new low-carbon resources. Further, these

[37] CUB/400, Jenks/23.

[38] *Id*. at 30.

considerations are explored fully in Integrated Resource Planning proceedings and are misplaced in discussing an LEA in a general rate case, which should reflect the assumptions established in those proceedings. Given CUB's concern that there are incorrect assumptions in the LEA calculation, CUB should propose a change to those assumptions, i.e., shortening the depreciable life of the new customer connection. If the LEA were to be eliminated and existing customers would not benefit from the addition of economically viable new customers, then the rates would be higher, resulting in customer attrition sooner or quicker than otherwise. As I pointed out in my Reply Testimony, this could become a self-fulfilling prophecy—"Where a presumption is used to set relative costs, customers make decisions based on those relative costs, and the presumption is ultimately realized—not due to its inherent accuracy but due to the regulations that impact consumer behavior."[39]

Q. Explain CUB's concern about a potential mismatch in NW Natural's LEA calculation between the term of the investment analysis and the useful life (and therefore depreciation rate) used in the line extension allowance calculation.[40]

A. CUB incorrectly assumes that because the term of NW Natural's investment analysis is shorter than the useful life of the new service, there will necessarily be a stranded asset at the end of the term of the investment analysis calculation.[41]

[39] NW Natural/1800, Taylor/45.

[40] CUB/400, Jenks/26-29.

[41] CUB/400, Jenks/26, lines 13-19.

As they relate to CUB's argument, stranded costs are created when an asset with undepreciated book value is no longer used and useful.

Q. Is it reasonable to conduct an LEA investment analysis where the term of the calculation is different than the useful life of the underlying assets?

A. Yes. While some utilities may calculate an LEA using a revenue term that is longer and aligned with the useful life of connection assets,[42] others shorten the revenue term to calculate a conservative allowance (i.e., lower allowance) amount which benefits existing customers sooner rather than later. NW Natural's LEA investment analysis follows the latter approach by reflecting the useful life of the assets through the depreciation rates yet shortens the revenue term, resulting in a more conservative estimate of an economical allowance. In addition, I would like to clarify what was stated in my Reply Testimony. While I noted that NW Natural's investment analysis reflects the expected time a new customer is to remain on the system,[43] this should not be interpreted as the expected revenue stream from the use of connection assets. New customers are continually replaced by other new customers using the same service and meter (e.g., a new homeowner), and the Company expects assets will remain used and useful for the duration of their estimated lives.

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[42] In addition, some utilities use a perpetual net present value approach which assumes revenues in perpetuity.

[43] NW Natural/1800, Taylor/17-19.

Q. Is CUB accurate in stating that, "[i]f a customer leaves the system after 30 years, which is a model assumption, then that customer leaves behind a stranded cost for other customers to pay"?[44]

A. Absolutely not. CUB's statement assumes that after 30 years no revenue is expected from the connection assets—which in turn means that CUB is assuming that every new customer choosing to add gas service now and invest in a gas furnace (or water heater, etc.) will, with certainty, turn around and abandon gas heating service at the end of 30 years. Moreover, CUB's statement assumes that at the end of the 30 years, all new gas customers will necessarily abandon all natural gas use altogether and invest in alternatives that do not rely on access to the natural gas system. This assumes that no dual-use heat pumps would be adopted, and all hot water and other gas appliances would be replaced as well. This is a profoundly unsupported assumption that CUB has proffered to justify introducing a flawed and misplaced stranded cost argument into an LEA review.

Q. Does CUB's Rebuttal Testimony demonstrate an accurate understanding of how the term of the investment analysis relates to the depreciation rates used in the calculation?

A. No. First, the investment analysis model is meant to reflect the book results of the revenues and costs of the new customer. The LEA assumes a life of the service and, consistent with historical and current trends,[45] does ***not*** presume customers will replace their gas equipment with electric at the end of the life of the appliance

[44] CUB/400, Jenks/26, lines 17-19.

[45] NW Natural/1700, Heiting-Bracken/ 72-74.

and abandon gas service. Therefore, it was not necessary then, and is not necessary now, to match the term of the investment analysis calculation to the useful life of the new assets. Second, the depreciation rates used in the LEA calculation are the rates determined by a thorough depreciation study, the results of which are approved by the Commission and subsequently implemented in rates. Furthermore, those depreciation rates apply to all of the Company's assets, which serve both new and existing customers.

Q. Based on correctly understanding these underlying variables, how would the allowance change if the investment analysis model used a shorter useful life term and higher depreciation rate?

A. For strictly illustrative purposes, and to demonstrate how CUB's criticisms would actually impact the LEA calculation, I have updated the LEA results I provided in my Reply Testimony with two scenarios based on CUB's concerns about a mismatch between the term of the investment analysis calculation and the useful life of the assets.[46] In the first scenario, I utilize a 20-year investment analysis calculation with a depreciation rate of 5.0 percent (to align with a 20-year useful life). In the second scenario, I utilize a 30-year investment analysis calculation with a depreciation rate of 3.33 percent (to align with a 30-year useful life). In both of these scenarios, the term of the investment analysis calculation matches the useful life of the assets.

[46] *See* NW Natural/1800, Taylor/34, lines 9-15.

Table 2 – Modified LEA Calculations

	Previous Illustrative Example [47]	Scenario 1	Scenario 2
UPC (therms/year)	532	532	532
IRR Term (years)	20	20	30
Depreciation Rate	2.50%	5.00%	3.33%
Allowable LEA	$3,200	$3,290	$3,840

As shown in Table 2 above, the changes in both scenarios result in <u>increases</u> in the economical line extension investment amount.[48] A quicker reduction of rate base resulting from the higher depreciation rates increases the allowance due to the lower return components in the investment analysis. This analysis demonstrates that the use of a shorter revenue term than the expected useful life results in a conservative estimate that provides benefits to existing customers sooner than if the revenue term were matched to the useful life term. As with the illustrative analysis presented in my Reply Testimony, NW Natural is not agreeing with CUB's assumptions but rather updating the investment analysis to reflect CUB's preferred assumptions. This analysis demonstrates that using the existing investment analysis to set the LEA is still a valid, systematic, and fact-based approach. CUB would prefer to simply throw out the investment analysis rather

[47] *See* NW Natural/1800, Taylor/34, lines 9-15.

[48] The assumed revenues were not adjusted to reflect higher rates that would result from shorter depreciable lives. Increasing the assumed revenues would also increase the economical LEA. In addition, increasing the term of revenues to match the expected useful life would also increase the economical LEA.

than reflect updated assumptions, which is not a valid, systematic, and fact-based approach.

Q. What is your response to CUB's view that the Internal Rate of Return ("IRR") model is flawed and should not be used to calculate an LEA?[49]

A. The IRR model (also referred to as the investment analysis) used to determine an economical LEA is not flawed. While CUB may disagree with some assumptions used in NW Natural's model, the methods employed in the model are transparent, replicable, and can take into account varying assumptions; as such, the model is durable in its application. IRR modeling is used extensively by all modern industries to help management make decisions on potential new expansions and new investments.

Q. How do you respond to CUB's suggestion that NW Natural should be required to prove that growth-related investments are prudent and recoverable from customers?[50]

A. NW Natural has shown that the level of the line extension allowance in Schedule X is prudent. My Reply Testimony presented updated investment analysis calculations demonstrating that the current allowance is below an economic allowance. This Surrebuttal Testimony and my Reply Testimony both discuss the inequities and erroneous conclusions resulting from placing 100 percent of CPP compliance costs on new customers.

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[49] CUB/400, Jenks/26.

[50] *Id.* at 34.

Q. CUB states that "NWN should have to prove that growing the system, in spite of the need to reduce therms to reduce its compliance obligation, is reasonable."[51] How do you respond?

A. I disagree that the need to reduce therms is relevant to an evaluation of the LEA. As I have previously discussed, the costs of CPP compliance will be borne by NW Natural's customers through base rates, and are not appropriately incorporated into the LEA. Moreover, CUB's recommendation to require the Company to prove that growing the system is reasonable is outside the bounds of a general rate case.

III. RESPONSE TO COALITION WITNESS ED BURGESS

Q. How do you respond to the Coalition's claims that NW Natural has an inherent bias in supporting additional capital expenditures and an "incentive to propose higher line extension allowances"?[52]

A. First, to be clear, NW Natural is not proposing a higher LEA. NW Natural has known for some time that its current LEA is lower than an investment analysis would produce, given lower cost of service components such as the federal tax rate and return rates, as well as the increased revenues from customers, as rates have increased. This was demonstrated in my Reply Testimony, where the investment analysis is updated to reflect new cost and revenue details, which demonstrate the allowance could be higher based on the modeling used to set the

[51] *Id*. at 34.

[52] Coalition/500, Burgess/3.

current allowance.[53] However, NW Natural is not proposing to increase the LEA, but rather the Company stated that the current line extension allowance is justified.

Moreover, as I noted in response to a similar comment by CUB, the Company's incentive or lack of an incentive to propose a specific LEA is not an appropriate consideration when evaluating an LEA. The existence of an LEA and a principled approach to calculating an appropriate value of the expected customer revenues is how regulators ensure an appropriate balance between existing customers, new customers, and utility shareholders.

Q. The Coalition provides some caveats to their acknowledgment that new customer additions could result in benefits to existing customers.[54] Please summarize these caveats.

A. The Coalition identifies three caveats. First, the benefit to existing customers would only materialize if NW Natural files for a rate decrease or files for a smaller increase in the future.[55] Second, the reduction in average costs is only applicable to joint use facilities or common costs and not service lines.[56] Third, the increase in gas demand could increase commodity prices in the region.[57]

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[53] *See* NW Natural/1800, Taylor/34.

[54] Coalition/500, Burgess/4.

[55] *Id.* at 4, lines 10-12.

[56] *Id.* at 4, lines 12-15.

[57] *Id.* at 4, lines 15-17.

Q. Are these reasonable qualifications to the general understanding that new customers result in benefits to existing customers?

A. No. First, these new customers can offset revenue shortfalls mitigating the need for the Company to propose an increase to base rates. While I do not dispute the Coalition's conclusion that the "reduction in average costs is really only applicable to joint use facilities or common costs,"[58] I do dispute their conclusion that since service lines are not joint use, they only partially agree that new customer additions result in benefits to existing customers. Service lines are costs paid for with funds from the line extension allowance, or if the costs are above the allowance, they are paid for by the customers. All customers pay for only the economically viable portion, which is evaluated based on the direct assignment of these costs to the new customer. In other words, the fact that they are not joint use is the exact reason they are considered as direct incremental costs in evaluating required customer contributions. Lastly, both supply and demand highly influence the clearing price of a commodity, and as shown in my Reply Testimony, the delivered cost of natural gas has remained stable over the last decade. The Coalition's concern that adding customers could increase commodity prices in the region is completely unfounded and unwarranted.

[58] Coalition/500, Burgess/4.

Q. How do you respond to the Coalition's claim that "if no allowances were given, average costs would be *even lower* for existing customers since they would not be required to pay for any line extension subsidies"[59]?

A. I disagree for several reasons. At the outset, I will repeat what I have said above: LEAs are not appropriately referred to as "subsidies." Moreover, the Coalition's statement is based on the flawed assumption that customers will join the gas system even if the LEA is eliminated. As I have pointed out, eliminating the LEA is very likely to reduce the number of customers that are added to the gas system, thus reducing the number of customers over which the fixed costs of the system are spread. On this point, NW Natural's analysis in docket UM 2178 demonstrates that under all CPP compliance scenarios, customer rates are lower if new customers continue to join the system.[60]

Finally, while protecting existing customers is an important goal, it is not the only goal of regulation in general and the LEA specifically. If existing customers were the only consideration, there would be different policies in place. Regulatory commissions ensure fairness and reasonable economic outcomes between various stakeholders, including potential new customers. The line extension policy should only be judged on whether the allowance level appropriately balances the interests of existing and new customers. Eliminating the LEA will impact the number of new customers added to the gas distribution system, which will lower

[59] Coalition/500, Burgess/4-5 (emphasis in original).

[60] NW Natural/2400, Heiting-Bracken/17-18.

the benefits to existing customers from adding economically viable connections. As such, the average costs, all else equal, would be higher, not lower, as speculated by the Coalition.

Q. How do you respond to the Coalition's claim that the line extension allowance "distorts the price signal to prospective customers for new gas connections"?[61]

A. The term price signal refers to information conveyed to consumers and producers through prices that impacts the supply produced and the quantity demanded. In short, it refers to prices and the informative nature of prices which can impact consumer and producer decisions. When price signals are distorted, they are conveying distorted information as to the relationship between impacts from consumer and producer behavior. For example, price floors prevent prices from being lower than a set amount and distort price signals. NW Natural's LEA does not distort price signals. It reflects the costs and benefits of adding a new customer to the system. On the contrary, eliminating the allowance distorts price signals, as it forces new customers to pay 100 percent of their connection costs with no consideration of the fact that they are paying for these same costs through rates. With the existence of an LEA, prices (the cost of connection) are set appropriately where a prospective customer is afforded an allowance to account for their future revenues as their future gas bills will pay for their service (including the cost of the LEA over time) and incremental O&M costs that they cause. If their revenue is

[61] Coalition/500, Burgess/10.

insufficient compared to their future costs of service, they need to contribute the deficiency. As a result, the price paid incorporates costs and benefits, is direct and transparent to the customer, and is the opposite of distorted. The consumer can make an informed decision on choosing to connect to NW Natural's system and utilize natural gas as they respond to a price signal that is not distorted.

Q. How long does the Coalition say it will take for existing customers to start benefitting from new customers joining the system?

A. The Coalition states: "The analysis[[62]] clearly shows that it would take 30 years of margin sales for NW Natural customers to recoup their costs (including a return at the specified 6.9% rate of return) associated with the Category A allowance tier of approximately $2,900."[63] The Coalition goes on to say: "This DCF analysis confirms to me that existing customers would see no benefit relative to an alternative investment for 30 years."[64]

Q. Do you agree with the Coalition's statements?

A. No. Based on the investment analysis the Coalition is referencing,[65] a new customer contributes margin revenue each year following its addition to the system. O&M expenses, taxes, and tax benefits from depreciation are netted against the margin revenue to arrive at operating cash flow.[66] By year 12 of the

[62] "The analysis" refers to the DCF analysis cited in the Coalition's opening testimony, which is synonymous with the term used in this surrebuttal testimony "investment analysis". *See* Coalition/212, Burgess (UG 435 CUB DR 52 Attachment 1).

[63] Coalition/500, Burgess/8, lines 2-4.

[64] *Id*. at 8, lines 8-9.

[65] *See* Coalition/212, Burgess (UG 435 CUB DR 52 Attachment 1).

[66] *See* Coalition/212, Burgess/'Financials' tab, Row 10 under "IRR Calculation".

investment analysis, the new customer has contributed more operating cash flow than the full cost of the maximum allowance ($2,973 vs. $2,900). This means that for years 13 and beyond, all of the operating cash flow (i.e., margin revenue net of expenses) associated with new customers is a net benefit to the system, including existing customers.

Q. Is the line extension allowance a windfall payment to wealthy customers, as the Coalition claims?[67]

A. No. The LEA can no more be a windfall payment to wealthy customers than it is a windfall payment to low-income customers. In contrast to the Coalition's opinion, the LEA does not represent a windfall nor a subsidy to customers. In economic terms, the Coalition seeks to identify the consumer surplus, which can be calculated by the difference between the maximum price the consumer would be willing to pay and the actual price paid. As I stated in my Reply Testimony, this calculation requires knowledge of a customer's preferences, which are only known by that customer. The result of applying a policy to thousands of customers is that some receive service and meters for less than they would pay. Some may choose not to use natural gas because their connection costs are above the allowance, and they cannot or do not want to pay the required contribution. However, this is irrelevant to guiding this Commission. The Commission should not set a policy based on the assumption by the Coalition that all allowances result in a consumer

[67] Coalition/500, Burgess/11.

surplus, and thus to "avoid ratepayer-funded windfall payments to wealthy customers"[68] requires complete elimination of the LEA.

Q. Should utility rates and charges be set based on the value of service to customers and customers' willingness to pay?

A. No, this is not the appropriate framework to set rates and charges. Outside of special contract agreements that may consider the value of service or economic alternatives, utility rates should be based on the cost to provide service, not some speculative perceived value of the service. While a distinction can be made between setting rates based on marginal versus embedded costs, the principle of setting rates based on costs rather than the value of service or willingness to pay is a fundamental tenet of utility rate regulation. Setting rates for rate classes based on the value of service would cause mayhem in its application as customers will take issue with charges not accurately reflecting their willingness to pay or the value they perceive from the service.

Q. What response do you have to the Coalition's concern that the non-residential line extension allowance "is theoretically unlimited"?[69]

A. The Coalition is concerned that Schedule X does not appear to place any limit on the non-residential allowance amount and speculates that the Company applies its own limits in practice at the Company's discretion. The Coalition quotes one sentence from Schedule X relating to the minimum of the non-residential allowance

[68] Coalition/500, Burgess/11.

[69] *Id.* at 13.

set at 5.0 times the annual margin revenue but did not provide the preceding sentence, which is: "The Company will perform an investment analysis for each installation to determine the amount of any Construction Allowance."[70] As stated in my Reply Testimony, the Company provided details of this investment analysis and offered a demonstration of the software used to conduct the analysis.[71] In its Rebuttal Testimony, the Coalition critiques the Company for using its discretion and speculates that the allowance is theoretically unlimited but states that a demonstration of the Company's investment analysis, which is required by the tariff, was not necessary because what was written in Schedule X was readily apparent.[72] The fact is that Schedule X states the Company uses an investment analysis, and the Company provided details on this analysis. The Coalition is critical of the Company's method but provides no evidence as to what about the Company's method should be changed, except to submit that the allowance should be zero.

[70] NW Natural, Schedule X, PUC Or. 25 (Nov. 1, 2012) at X-6 (available at: https://www.nwnatural.com/about-us/rates-and-regulations/oregon-tariff-book).

[71] While the Coalition believes my statement in Reply Testimony that "[t]he Coalition did not acknowledge the Company's offer to provide a demonstration" (NW Natural/1800, Taylor/16), "unfairly insinuates a lack of due diligence," (Coalition/500, Burgess/14), that was not the intent. My Reply Testimony included that statement to acknowledge that the Company is still open to provide a demonstration; as the whole quote indicates: "The Coalition did not acknowledge the Company's offer to provide a demonstration, and the Company remains open to do so." (NW Natural/1800, Taylor/16).

[72] Coalition/500, Burgess/14.

Q. Is the Company's method to establish LEAs for non-residential customers appropriate?

A. Yes. NW Natural evaluates the expected revenues and costs associated with prospective non-residential customer connections by using the Commission's own words relating to PGE's process, "recognizing that a larger use customer should provide greater margins and thus can be offered a greater line extension amount."[73] If a natural gas utility is evaluating connection costs for a customer that may contribute several million dollars a year in revenue (possibly a material offset to the utility's total annual revenue requirement), it is important to review the amount of the allowance in the context of the total revenues, as it could be worth setting an allowance for tens of thousands of dollars for specialized measuring and regulating equipment. It would be inappropriate to arbitrarily set a dollar amount limit, as the economically viable allowance amount will differ depending on the total revenues.

Q. Are the cost implications of the specific size and nature of the connected load of prospective Commercial and Industrial customers or large residential housing developments conducive to a standard allowance or a maximum limit?

A. No. Line extension allowance for many large Commercial or Industrial service and meter installations must be determined by a number of complex factors, including the size of the connected load and pressure requirements at the appliance, as well

[73] *In Re Portland General Electric Company, Advice No. 20-14, Schedule 300 Line Extension Allowance*, Docket ADV 1130, Order No. 20-483, App. A at 3 (Dec. 23, 2020).

as the prospective revenues provided from the rate schedule under which the customer's usage characteristics qualify. Similarly, the number of housing units in a buildout plan for residential development, the number of appliances, and the respective connected loads in each housing unit for prospective revenue calculations would be part of the analysis of the project.

Q. Does the Coalition present additional arguments relating to CPP compliance costs and the appropriate level of the LEA?

A. None that are based on anything but speculation. The Coalition is concerned that CPP compliance costs may result in lower sales and margins for the utility, impacting the line extension allowance calculation.[74] Lower sales do not equate to lower margins over time—particularly with NW Natural's existing decoupling mechanism. The Coalition's concern is misplaced.

The Coalition also believes that state policies should be considered when setting a higher or lower allowance.[75] As stated in my Reply Testimony, with the required CPP compliance, GHG reduction costs will no longer be an externality to the marketplace.[76] As such, the CPP should not influence subjective decisions about the appropriate level of a line extension allowance.

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[74] Coalition/500, Burgess/14.

[75] *Id*. at 15.

[76] NW Natural/1800, Taylor/22-23.

Q. How do you respond to the Coalition stating that their goal of eliminating the line extension allowance is to "encourage the overall market to adopt fossil-free solutions over time"? [77]

A. This is an important aspect of the Coalition's testimony. As the Coalition states, it is a worthy outcome of their proposed elimination of the allowance.[78] However, the Coalition fails to establish why the Commission should eliminate a gas utility's line extension allowance in a general rate case proceeding to encourage the market to adopt fossil-free solutions. While the Coalition's Rebuttal Testimony does not specify what the "fossil-free solutions" are, their Opening Testimony states a desirable outcome of their proposal is to see more customers opting for electric appliances instead of gas.[79] The Coalition fails to present testimony in this proceeding on when, to what degree, and at what price the alternative to natural gas, electricity, will be fossil-free. It is inappropriate and quite risky to consider such a drastic change to a gas utility's line extension policy in a general rate case proceeding without considering or evaluating the implications of eliminating NW Natural's LEA to "encourage the overall market to adopt fossil-free solutions over time."[80] It is best to let the interaction of market participants decide the rate and cost of adopting fossil-free solutions based on price signals that incorporate the relative costs of CPP compliance, not through a line extension policy.

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[77] Coalition/500, Burgess/11.

[78] *Id*..

[79] Coalition/200, Burgess/28.

[80] Coalition/500, Burgess/11.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibits of John D. Taylor

LINE EXTENSION POLICY
EXHIBITS 2601-2602

July 20, 2022

EXHIBITS 2601-2602 – LINE EXTENSION POLICY

Table of Contents

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of John D. Taylor

LINE EXTENSION POLICY
EXHIBIT 2601

July 20, 2022

NW Natural
Determination of Cost of Service

Input Capital Costs and Rates			
Cost of Capital	**% of Capital**	**Cost**	**Weighted Cost**
Debt	50.00%	4.271%	2.136%
Common Equity	50.00%	9.400%	4.700%
	100.00%		6.836%
State Tax Rate			7.60%
Federal Tax Rate			21.00%
Revenue Sensitive Rate (Franchise tax, Comm fee)			2.741%
Depreciation Rate			3.33%
Property Tax Rate			1.50%
Incremental O&M			79.19
Investment			3,840

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
2	O&M	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
3	Property Taxes	57	55	53	51	49	47	45	43	41	39	37	36	34	32	30
	Taxes on Equity Return															
4	State	18	18	17	16	15	15	14	13	13	12	11	11	10	9	8
5	Federal	47	45	43	41	39	37	36	34	32	30	29	27	25	23	22
6	Total Taxes	66	63	60	57	55	52	49	47	45	42	40	37	35	32	30
	Return on Rate Base															
7	Debt	81	77	74	70	67	64	61	58	55	52	49	46	43	40	37
8	Common Equity	177	170	163	155	148	141	134	127	121	114	107	101	94	88	81
9	Total Return	258	248	236	225	215	205	195	185	175	166	156	147	137	128	118
10	Subtotal Cost of Service	587	573	556	541	526	511	496	482	468	454	441	427	413	399	385
11	Revenue Sensitive Items	17	16	16	15	15	14	14	14	13	13	12	12	12	11	11
12	Total Cost of Service	$604	$589	$572	$556	$540	$525	$510	$496	$482	$467	$453	$439	$424	$410	$396
	Rate Base - net of deprec. & def. tax	$3,774	$3,624	$3,458	$3,298	$3,143	$2,993	$2,847	$2,705	$2,565	$2,425	$2,286	$2,146	$2,006	$1,867	$1,727
	Income Taxes															
	Gross up of Equity Return	243	233	223	212	202	193	183	174	165	156	147	138	129	120	111
	Less: State tax	18	18	17	16	15	15	14	13	13	12	11	11	10	9	8
	Federal Taxable Income	225	216	206	196	187	178	169	161	153	144	136	128	119	111	103
	Less: Federal Tax	47	45	43	41	39	37	36	34	32	30	29	27	25	23	22
	Return	177	170	163	155	148	141	134	127	121	114	107	101	94	88	81
	Deferred Taxes															
	Book Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
	Tax Depreciation	144	277	256	237	219	203	188	174	171	171	171	171	171	171	171
	Book-Tax Difference	16	149	129	109	92	75	60	46	43	43	43	43	43	43	43
	Tax Effect	4	40	35	30	25	20	16	12	12	12	12	12	12	12	12
	MACRS Depreciation - 2(	3.75%	7.22%	6.68%	6.18%	5.71%	5.29%	4.89%	4.52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
	Property Tax Base	3,778	3,650	3,522	3,395	3,267	3,139	3,011	2,883	2,755	2,627	2,500	2,372	2,244	2,116	1,988

		Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
1	Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
2	O&M	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
3	Property Taxes	28	26	24	22	20	18	16	14	13	11	9	7	5	3	1
	Taxes on Equity Return															
4	State	8	7	6	6	5	4	4	3	3	3	2	2	1	1	0
5	Federal	20	18	16	15	13	11	10	9	8	6	5	4	3	2	1
6	Total Taxes	28	25	23	20	18	16	14	12	11	9	7	6	4	2	1
	Return on Rate Base															
7	Debt	34	31	28	25	22	19	17	15	13	11	9	7	5	3	1
8	Common Equity	75	68	61	55	48	42	37	33	29	24	20	15	11	7	2
9	Total Return	109	99	89	80	70	62	54	48	42	35	29	23	16	10	3
10	Subtotal Cost of Service	371	357	343	329	316	303	292	282	272	262	252	242	232	222	212
11	Revenue Sensitive Items	10	10	10	9	9	9	8	8	8	7	7	7	7	6	6
12	Total Cost of Service	$382	$367	$353	$339	$324	$311	$300	$290	$280	$269	$259	$249	$239	$229	$218
	Rate Base - net of deprec. & def. tax	$1,588	$1,448	$1,308	$1,169	$1,029	$901	$796	$703	$610	$516	$423	$329	$236	$143	$49
	Income Taxes															
	Gross up of Equity Return	102	93	84	75	66	58	51	45	39	33	27	21	15	9	3
	Less: State tax	8	7	6	6	5	4	4	3	3	3	2	2	1	1	0
	Federal Taxable Income	94	86	78	70	61	54	47	42	36	31	25	20	14	8	3
	Less: Federal Tax	20	18	16	15	13	11	10	9	8	6	5	4	3	2	1
	Return	75	68	61	55	48	42	37	33	29	24	20	15	11	7	2
	Deferred Taxes															
	Book Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
	Tax Depreciation	171	171	171	171	171	86	0	0	0	0	0	0	0	0	0
	Book-Tax Difference	43	43	43	43	43	(42)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)
	Tax Effect	12	12	12	12	12	(11)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)
	MACRS Depreciation - 2(	4.46%	4.46%	4.46%	4.46%	4.46%	2.23%	0.00%								
	Property Tax Base	1,860	1,732	1,604	1,477	1,349	1,221	1,093	965	837	709	581	454	326	198	70

Income Statement		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1 Revenue		462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance	$79.19	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Depreciation	3.33%	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)
4 Franchise Tax	2.74%	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	1.50%	(58)	(56)	(54)	(52)	(50)	(48)	(46)	(44)	(42)	(40)	(38)	(37)	(35)	(33)	(31)
5 Interest Expense	4.27%	(82)	(77)	(74)	(70)	(67)	(64)	(61)	(58)	(55)	(52)	(49)	(46)	(43)	(40)	(37)
6 Net Income Before Tax		102	109	114	120	125	130	135	140	145	150	155	160	165	170	174
7 Income Tax	27.00%	28	29	31	32	34	35	37	38	39	40	42	43	44	46	47
8 Net Available to Common		75	80	84	87	91	95	99	102	106	109	113	117	120	124	127

Income Statement	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
1 Revenue	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Depreciation	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)
4 Franchise Tax	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(12)	(10)	(8)	(6)	(4)	(2)
5 Interest Expense	(34)	(31)	(28)	(25)	(22)	(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	(3)	(1)
6 Net Income Before Tax	179	184	189	194	199	203	208	211	215	219	223	227	231	235	239
7 Income Tax	48	50	51	52	54	55	56	57	58	59	60	61	62	63	64
8 Net Available to Common	131	134	138	142	145	149	151	154	157	160	163	166	169	171	174

Balance Sheet	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Assets															
9 Gross Plant	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
10 Accumulated Depreciation	128	256	384	511	639	767	895	1,023	1,151	1,279	1,407	1,534	1,662	1,790	1,918
11 Net Plant	3,712	3,584	3,456	3,329	3,201	3,073	2,945	2,817	2,689	2,561	2,433	2,306	2,178	2,050	1,922
12 Total Assets	3,712	3,584	3,456	3,329	3,201	3,073	2,945	2,817	2,689	2,561	2,433	2,306	2,178	2,050	1,922
Liabilities and Equity															
13 Common Equity	1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898	829
14 Long Term Debt	1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898	829
15 Deferred Taxes	4	45	79	109	134	154	170	182	194	206	218	229	241	253	265
16 Total Liabilities and Equity	3,712	3,584	3,456	3,329	3,201	3,073	2,945	2,817	2,689	2,561	2,433	2,306	2,178	2,050	1,922

Balance Sheet	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Assets															
9 Gross Plant	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
10 Accumulated Depreciation	2,046	2,174	2,302	2,430	2,557	2,685	2,813	2,941	3,069	3,197	3,325	3,453	3,580	3,708	3,836
11 Net Plant	1,794	1,666	1,538	1,410	1,283	1,155	1,027	899	771	643	515	387	260	132	4
12 Total Assets	1,794	1,666	1,538	1,410	1,283	1,155	1,027	899	771	643	515	387	260	132	4
Liabilities and Equity															
13 Common Equity	759	689	619	549	480	427	381	334	287	241	194	147	101	54	7
14 Long Term Debt	759	689	619	549	480	427	381	334	287	241	194	147	101	54	7
15 Deferred Taxes	276	288	300	311	323	300	266	231	197	162	128	93	59	24	(11)
16 Total Liabilities and Equity	1,794	1,666	1,538	1,410	1,283	1,155	1,027	899	771	643	515	387	260	132	4

Cash Flow Statement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Operating Activities															
1 Net Income	75	80	84	87	91	95	99	102	106	109	113	117	120	124	127
2 Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
3 Deferred Taxes	4	40	35	30	25	20	16	12	12	12	12	12	12	12	12
4 Cash Provided by Operating Activities	207	248	246	245	244	243	243	243	245	249	253	256	260	263	267
Investing Activities															
5 Project	(3,840)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Cash Used in Investing Activities	(3,840)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Activities															
7 Common Stock Issued	1,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Long Term Debt Issued	1,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Long Term Debt Retired	(66)	(84)	(81)	(79)	(76)	(74)	(72)	(70)	(70)	(70)	(70)	(70)	(70)	(70)	(70)
10 Common Stock Dividends	(141)	(164)	(165)	(166)	(168)	(169)	(171)	(172)	(176)	(179)	(183)	(186)	(190)	(194)	(197)
11 Cash Provided by Financing Activities	3,633	(248)	(246)	(245)	(244)	(243)	(243)	(243)	(245)	(249)	(253)	(256)	(260)	(263)	(267)
12 Net Cash Flow	0	0	0	0	0	0	(0)	(0)	0	0	(0)	0	0	0	(0)

Cash Flow Statement	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Operating Activities															
1 Net Income	131	134	138	142	145	149	151	154	157	160	163	166	169	171	174
2 Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
3 Deferred Taxes	12	12	12	12	12	(23)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)
4 Cash Provided by Operating Activities	271	274	278	281	285	253	245	248	251	253	256	259	262	265	268
Investing Activities															
5 Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Cash Used in Investing Activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Activities															
7 Common Stock Issued	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Long Term Debt Issued	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Long Term Debt Retired	(70)	(70)	(70)	(70)	(70)	(52)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)
10 Common Stock Dividends	(201)	(204)	(208)	(211)	(215)	(201)	(198)	(201)	(204)	(207)	(210)	(212)	(215)	(218)	(221)
11 Cash Provided by Financing Activities	(271)	(274)	(278)	(281)	(285)	(253)	(245)	(248)	(251)	(253)	(256)	(259)	(262)	(265)	(268)
12 Net Cash Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		3,840	Input Investmen calibrate at 6 259
19 IRR	7 year	-13.71%	iterative or goal seek
20 IRR	10 year	-4 85%	
21 IRR	15 year	1.60%	
22 IRR	20 year	4.35%	
23 IRR	25 year	5.56%	
24 IRR	**30 year**	6.25%	

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
IRR Calculation	($3,840)	267	304	300	296	293	290	287	285	285	287	288	290	291	292	294
1 Revenue		462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance		(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Franchise Tax	2.74%	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	1 50%	(58)	(56)	(54)	(52)	(50)	(48)	(46)	(44)	(42)	(40)	(38)	(37)	(35)	(33)	(31)
5 Net Before Taxes		312	314	316	318	320	322	324	326	328	330	332	333	335	337	339
6 Income Tax	27 00%	84	85	85	86	86	87	87	88	88	89	90	90	91	91	92
7 Net After Tax		228	229	231	232	234	235	236	238	239	241	242	243	245	246	248
8 Tax Benefit on Interest																
9 Tax Benefit on Investment		39	75	69	64	59	55	51	47	46	46	46	46	46	46	46
10 Total Operating Cash (ROR Analysis)		267	304	300	296	293	290	287	285	285	287	288	290	291	292	294

	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
IRR Calculation	295	297	298	299	301	268	257	259	260	262	263	264	266	267	269
1 Revenue	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Franchise Tax	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(12)	(10)	(8)	(6)	(4)	(2)
5 Net Before Taxes	341	343	345	347	349	351	353	355	356	358	360	362	364	366	368
6 Income Tax	92	93	93	94	94	95	95	96	96	97	97	98	98	99	99
7 Net After Tax	249	250	252	253	255	256	257	259	260	262	263	264	266	267	269
8 Tax Benefit on Interest															
9 Tax Benefit on Investment	46	46	46	46	46	12	0	0	0	0	0	0	0	0	0
10 Total Operating Cash (ROR Analysis)	295	297	298	299	301	268	257	259	260	262	263	264	266	267	269

Plant Additions	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1 Plant		3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
2 Depreciation	3 33%	(128)	(256)	(384)	(511)	(639)	(767)	(895)	(1,023)	(1,151)	(1,279)	(1,407)	(1,534)	(1,662)	(1,790)	(1,918)
3 Net Plant		3,712	3,584	3,456	3,329	3,201	3,073	2,945	2,817	2,689	2,561	2,433	2,306	2,178	2,050	1,922
4 Deferred Taxes		4	45	79	109	134	154	170	182	194	206	218	229	241	253	265
5 Net Rate Base		3,708	3,540	3,377	3,220	3,067	2,919	2,775	2,635	2,495	2,355	2,216	2,076	1,937	1,797	1,657
6 Average Rate Base		3,774	3,624	3,458	3,298	3,143	2,993	2,847	2,705	2,565	2,425	2,286	2,146	2,006	1,867	1,727
DEBT	Rate															
7 New Debt		1,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Beginning Debt		0	1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898
9 Principal Payment		(66)	(84)	(81)	(79)	(76)	(74)	(72)	(70)	(70)	(70)	(70)	(70)	(70)	(70)	(70)
10 Ending Debt		1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898	829
11 Total Payment		(16)	(7)	(7)	(8)	(9)	(10)	(11)	(12)	(15)	(18)	(21)	(24)	(27)	(30)	(33)
12 Interest	4.271%	82	77	74	70	67	64	61	58	55	52	49	46	43	40	37
EQUITY																
13 Paid in		1,920	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Beginning Equity		0	1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898
15 Excess Dividend	(Net Inc)	(141)	(164)	(165)	(166)	(168)	(169)	(171)	(172)	(176)	(179)	(183)	(186)	(190)	(194)	(197)
16 Net Income		75	80	84	87	91	95	99	102	106	109	113	117	120	124	127
17 Ending Equity		1,854	1,770	1,688	1,610	1,534	1,459	1,387	1,317	1,248	1,178	1,108	1,038	968	898	829
18 Average Equity		1,887	1,812	1,729	1,649	1,572	1,496	1,423	1,352	1,282	1,213	1,143	1,073	1,003	933	864

Plant Additions	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
1 Plant	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
2 Depreciation	(2,046)	(2,174)	(2,302)	(2,430)	(2,557)	(2,685)	(2,813)	(2,941)	(3,069)	(3,197)	(3,325)	(3,453)	(3,580)	(3,708)	(3,836)
3 Net Plant	1,794	1,666	1,538	1,410	1,283	1,155	1,027	899	771	643	515	387	260	132	4
4 Deferred Taxes	276	288	300	311	323	300	266	231	197	162	128	93	59	24	(11)
5 Net Rate Base	1,518	1,378	1,239	1,099	959	854	761	668	574	481	388	294	201	108	14
6 Average Rate Base	1,588	1,448	1,308	1,169	1,029	907	808	714	621	528	434	341	248	154	61
DEBT															
7 New Debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Beginning Debt	829	759	689	619	549	480	427	381	334	287	241	194	147	101	54
9 Principal Payment	(70)	(70)	(70)	(70)	(70)	(52)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)
10 Ending Debt	759	689	619	549	480	427	381	334	287	241	194	147	101	54	7
11 Total Payment	(36)	(39)	(42)	(45)	(48)	(33)	(29)	(31)	(33)	(35)	(37)	(39)	(41)	(43)	(45)
12 Interest	34	31	28	25	22	19	17	15	13	11	9	7	5	3	1
EQUITY															
13 Paid in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Beginning Equity	829	759	689	619	549	480	427	381	334	287	241	194	147	101	54
15 Excess Dividend	(201)	(204)	(208)	(211)	(215)	(201)	(198)	(201)	(204)	(207)	(210)	(212)	(215)	(218)	(221)
16 Net Income	131	134	138	142	145	149	151	154	157	160	163	166	169	171	174
17 Ending Equity	759	689	619	549	480	427	381	334	287	241	194	147	101	54	7
18 Average Equity	794	724	654	584	515	453	404	357	311	264	217	171	124	77	31

Tax Depreciation		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1 Tax Depreciation Rate		3.75%	7.22%	6 68%	6.18%	5.71%	5.29%	4.89%	4 52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
2 Plant Additions		3,840														
3 Total Tax Depreciation		144	277	256	237	219	203	188	174	171	171	171	171	171	171	171
4 Tax Benefit @	27 00%	39	75	69	64	59	55	51	47	46	46	46	46	46	46	46
Book Depreciation																
5 Book Depreciation Rate		3 33%	3.33%	3 33%	3.33%	3 33%	3 33%	3.33%	3 33%	3.33%	3 33%	3 33%	3.33%	3 33%	3.33%	3 33%
6 Plant Additions		3,840														
7 Book Depreciation		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
8 Total Book Depreciation		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
9 Total Tax Depreciation		144	277	256	237	219	203	188	174	171	171	171	171	171	171	171
10 Difference		16	149	129	109	92	75	60	46	43	43	43	43	43	43	43
11 Deferred Taxes	27.00%	4	40	35	30	25	20	16	12	12	12	12	12	12	12	12
20 year MACRS		3.75%	7.22%	6 68%	6.18%	5.71%	5 29%	4.89%	4 52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%

Tax Depreciation	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
1 Tax Depreciation Rate	4.46%	4.46%	4.46%	4.46%	4.46%	1.12%	0.00%	0 00%	0.00%	0 00%	0.00%	0.00%	0 00%	0.00%	0 00%
2 Plant Additions															
3 Total Tax Depreciation	171	171	171	171	171	43	0	0	0	0	0	0	0	0	0
4 Tax Benefit @	46	46	46	46	46	12	0	0	0	0	0	0	0	0	0
Book Depreciation															
5 Book Depreciation Rate	3 33%	3.33%	3 33%	3.33%	3 33%	3 33%	3.33%	3 33%	3.33%	3.33%	3 33%	3.33%	3 33%	3.33%	3 33%
6 Plant Additions															
7 Book Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
8 Total Book Depreciation	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
9 Total Tax Depreciation	171	171	171	171	171	43	0	0	0	0	0	0	0	0	0
10 Difference	43	43	43	43	43	(85)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)	(128)
11 Deferred Taxes	12	12	12	12	12	(23)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)
20 year MACRS	4.46%	4.46%	4.46%	4.46%	4.46%	2 23%	0.00%	0 00%	0.00%	0.00%	0 00%	0.00%	0 00%	0.00%	0.00%

	Capital Structure	Cost Rate	Cost	After-tax Cost
Debt	50.00%	4 271%	2.136%	1 559%
Equity	50.00%	9.400%	4.700%	4.700%
	100.00%		**6.836%**	**6.259%**

Construction Costs 3,840

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of John D. Taylor

LINE EXTENSION POLICY
EXHIBIT 2602

July 20, 2022

NW Natural
Determination of Cost of Service

Input Capital Costs and Rates

Cost of Capital	% of Capital	Cost	Weighted Cost
Debt	50.00%	4.271%	2.136%
Common Equity	50.00%	9.400%	4.700%
	100.00%		6.836%
State Tax Rate			7.60%
Federal Tax Rate			21.00%
Revenue Sensitive Rate (Franchise tax, Comm fee)			2.741%
Depreciation Rate			5.00%
Property Tax Rate			1.50%
Incremental O&M			79.19
Investment			3,290

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
1	Depreciation	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
2	O&M	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79
3	Property Taxes	48	46	43	41	38	36	33	31	28	26	23	21	18	16	13	11	9	6	4	1
	Taxes on Equity Return																				
4	State	16	15	14	13	12	11	11	10	9	8	8	7	6	5	4	4	3	2	1	0
5	Federal	40	38	36	34	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1
6	Total Taxes	56	53	50	47	44	41	38	35	32	30	27	24	21	18	16	13	10	7	5	2
	Return on Rate Base																				
7	Debt	69	65	61	57	54	50	47	43	40	36	33	29	26	23	19	16	12	9	6	2
8	Common Equity	151	143	135	126	118	110	102	95	87	80	72	65	57	50	42	35	27	20	12	5
9	Total Return	220	208	196	184	172	160	149	138	127	116	105	94	83	72	61	50	40	29	18	7
10	Subtotal Cost of Service	567	550	532	515	497	480	464	447	431	415	399	383	367	350	334	318	302	286	270	253
11	Revenue Sensitive Items	16	16	15	15	14	14	13	13	12	12	11	11	10	10	9	9	9	8	8	7
12	Total Cost of Service	$583	$566	$547	$529	$511	$494	$477	$460	$443	$427	$410	$393	$377	$360	$344	$327	$310	$294	$277	$261
	Rate Base - net of deprec. & def. tax	$3,213	$3,044	$2,863	$2,686	$2,513	$2,344	$2,178	$2,017	$1,857	$1,697	$1,537	$1,377	$1,218	$1,058	$898	$739	$579	$419	$259	$100
	Income Taxes																				
	Gross up of Equity Return	207	196	184	173	162	151	140	130	120	109	99	89	78	68	58	48	37	27	17	6
	Less: State tax	16	15	14	13	12	11	11	10	9	8	8	7	6	5	4	4	3	2	1	0
	Federal Taxable Income	191	181	170	160	149	139	130	120	110	101	91	82	72	63	53	44	34	25	15	6
	Less: Federal Tax	40	38	36	34	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1
	Return	151	143	135	126	118	110	102	95	87	80	72	65	57	50	42	35	27	20	12	5
	Deferred Taxes																				
	Book Depreciation	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
	Tax Depreciation	123	238	220	203	188	174	161	149	147	147	147	147	147	147	147	147	147	147	147	147
	Book-Tax Difference	(41)	73	55	39	23	9	(4)	(16)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
	Tax Effect	(11)	20	15	10	6	3	(1)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	MACRS Depreciation - 20	3.75%	7.22%	6.68%	6.18%	5.71%	5.29%	4.89%	4.52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
	Property Tax Base	3,202	3,038	2,873	2,709	2,544	2,380	2,215	2,051	1,886	1,722	1,557	1,393	1,228	1,064	899	735	570	406	241	77
	Tax Calculation Check	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Income Statement		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
1 Revenue		462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance	$79.19	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Depreciation	5.00%	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)	(165)
4 Franchise Tax	2.74%	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	1.50%	(49)	(47)	(44)	(42)	(39)	(37)	(35)	(32)	(30)	(27)	(25)	(22)	(20)	(17)	(15)	(12)	(10)	(7)	(5)	(2)
5 Interest Expense	4.27%	(70)	(65)	(61)	(57)	(54)	(50)	(47)	(43)	(40)	(36)	(33)	(29)	(26)	(23)	(19)	(16)	(12)	(9)	(6)	(2)
6 Net Income Before Tax		86	94	100	106	112	118	124	130	136	142	148	154	160	166	171	177	183	189	195	201
7 Income Tax	27.00%	23	25	27	29	30	32	34	35	37	38	40	42	43	45	46	48	49	51	53	54
8 Net Available to Common		63	68	73	77	82	86	91	95	99	104	108	112	117	121	125	129	134	138	142	147

Balance Sheet	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Assets																				
9 Gross Plant	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290
10 Accumulated Depreciation	165	329	494	658	823	987	1,152	1,316	1,481	1,645	1,810	1,974	2,139	2,303	2,468	2,632	2,797	2,961	3,126	3,290
11 Net Plant	3,126	2,961	2,797	2,632	2,468	2,303	2,139	1,974	1,810	1,645	1,481	1,316	1,152	987	823	658	494	329	165	-
12 Total Assets	3,126	2,961	2,797	2,632	2,468	2,303	2,139	1,974	1,810	1,645	1,481	1,316	1,152	987	823	658	494	329	165	-
Liabilities and Equity																				
13 Common Equity	1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90	10
14 Long Term Debt	1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90	10
15 Deferred Taxes	(11)	9	24	34	40	43	42	38	33	28	23	18	14	9	4	(1)	(5)	(10)	(15)	(20)
16 Total Liabilities and Equity	3,126	2,961	2,797	2,632	2,468	2,303	2,139	1,974	1,810	1,645	1,481	1,316	1,152	987	823	658	494	329	165	-

Cash Flow Statement	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Operating Activities																				
1 Net Income	63	68	73	77	82	86	91	95	99	104	108	112	117	121	125	129	134	138	142	147
2 Depreciation	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
3 Deferred Taxes	(11)	20	15	10	6	3	(1)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
4 Cash Provided by Operating Activities	216	253	252	252	253	253	254	255	259	263	268	272	276	281	285	289	293	298	302	306
Investing Activities																				
5 Project	(3,290)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Cash Used in Investing Activities	(3,290)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financing Activities																				
7 Common Stock Issued	1,645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Long Term Debt Issued	1,645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Long Term Debt Retired	(77)	(92)	(90)	(87)	(85)	(84)	(82)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)
10 Common Stock Dividends	(139)	(160)	(163)	(165)	(167)	(170)	(173)	(175)	(179)	(184)	(188)	(192)	(196)	(201)	(205)	(209)	(214)	(218)	(222)	(226)
11 Cash Provided by Financing Activities	3,074	(253)	(252)	(252)	(253)	(253)	(254)	(255)	(259)	(263)	(268)	(272)	(276)	(281)	(285)	(289)	(293)	(298)	(302)	(306)
12 Net Cash Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3,290 Input Investmen
calibrate at 6 259

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19	IRR	7 year	-10.77%
20	IRR	10 year	-2 27%
21	IRR	15 year	3.76%
22	IRR	20 year	6.25%
23	IRR	25 year	7.32%
24	IRR	**30 year**	7.90%

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
IRR Calculation	($3,290)	267	300	297	294	292	290	288	287	288	290	292	293	295	297	299	301	302	304	306	308
1 Revenue		462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
2 Operations & Maintenance		(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)	(79)
3 Franchise Tax	2.74%	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)	(13)
4 Property Tax	1 50%	(49)	(47)	(44)	(42)	(39)	(37)	(35)	(32)	(30)	(27)	(25)	(22)	(20)	(17)	(15)	(12)	(10)	(7)	(5)	(2)
5 Net Before Taxes		321	323	326	328	330	333	335	338	340	343	345	348	350	353	355	358	360	363	365	367
6 Income Tax	27 00%	87	87	88	89	89	90	91	91	92	93	93	94	95	95	96	97	97	98	99	99
7 Net After Tax		234	236	238	239	241	243	245	247	248	250	252	254	256	257	259	261	263	265	266	268
8 Tax Benefit on Interest																					
9 Tax Benefit on Investment		33	64	59	55	51	47	43	40	40	40	40	40	40	40	40	40	40	40	40	40
10 Total Operating Cash (ROR Analysis)		267	300	297	294	292	290	288	287	288	290	292	293	295	297	299	301	302	304	306	308

Plant Additions	Rate	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
1 Plant		3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290
2 Depreciation	5 00%	(165)	(329)	(494)	(658)	(823)	(987)	(1,152)	(1,316)	(1,481)	(1,645)	(1,810)	(1,974)	(2,139)	(2,303)	(2,468)	(2,632)	(2,797)	(2,961)	(3,126)	(3,290)
3 Net Plant		3,126	2,961	2,797	2,632	2,468	2,303	2,139	1,974	1,810	1,645	1,481	1,316	1,152	987	823	658	494	329	165	0
4 Deferred Taxes		(11)	9	24	34	40	43	42	38	33	28	23	18	14	9	4	(1)	(5)	(10)	(15)	(20)
5 Net Rate Base		3,137	2,952	2,773	2,598	2,427	2,260	2,097	1,936	1,777	1,617	1,457	1,298	1,138	978	818	659	499	339	180	20
6 Average Rate Base		3,213	3,044	2,863	2,686	2,513	2,344	2,178	2,017	1,857	1,697	1,537	1,377	1,218	1,058	898	739	579	419	259	100
DEBT	Rate																				
7 New Debt		1,645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Beginning Debt		0	1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90
9 Principal Payment		(77)	(92)	(90)	(87)	(85)	(84)	(82)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)	(80)
10 Ending Debt		1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90	10
11 Total Payment		6	(27)	(29)	(30)	(32)	(33)	(35)	(37)	(40)	(44)	(47)	(50)	(54)	(57)	(61)	(64)	(67)	(71)	(74)	(78)
12 Interest	4.271%	70	65	61	57	54	50	47	43	40	36	33	29	26	23	19	16	12	9	6	2
EQUITY																					
13 Paid in		1,645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Beginning Equity		0	1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90
15 Excess Dividend	(Net Inc)	(139)	(160)	(163)	(165)	(167)	(170)	(173)	(175)	(179)	(184)	(188)	(192)	(196)	(201)	(205)	(209)	(214)	(218)	(222)	(226)
16 Net Income		63	68	73	77	82	86	91	95	99	104	108	112	117	121	125	129	134	138	142	147
17 Ending Equity		1,568	1,476	1,386	1,299	1,214	1,130	1,048	968	888	808	729	649	569	489	409	329	249	170	90	10
18 Average Equity		1,607	1,522	1,431	1,343	1,256	1,172	1,089	1,008	928	848	769	689	609	529	449	369	289	210	130	50

Tax Depreciation		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
1 Tax Depreciation Rate		3.75%	7.22%	6 68%	6.18%	5.71%	5 29%	4.89%	4 52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%
2 Plant Additions		3,290																			
3 Total Tax Depreciation		123	238	220	203	188	174	161	149	147	147	147	147	147	147	147	147	147	147	147	147
4 Tax Benefit @	27 00%	33	64	59	55	51	47	43	40	40	40	40	40	40	40	40	40	40	40	40	40
Book Depreciation																					
5 Book Depreciation Rate		5 00%	5.00%	5 00%	5.00%	5 00%	5 00%	5.00%	5 00%	5.00%	5 00%	5 00%	5.00%	5 00%	5.00%	5 00%	5 00%	5.00%	5 00%	5.00%	5 00%
6 Plant Additions		3,290																			
7 Book Depreciation		165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
8 Total Book Depreciation		165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
9 Total Tax Depreciation		123	238	220	203	188	174	161	149	147	147	147	147	147	147	147	147	147	147	147	147
10 Difference		(41)	73	55	39	23	9	(4)	(16)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
11 Deferred Taxes	27.00%	(11)	20	15	10	6	3	(1)	(4)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
20 year MACRS		3.75%	7.22%	6 68%	6.18%	5.71%	5 29%	4.89%	4 52%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%	4.46%

	Capital Structure	Cost Rate	Cost	After-tax Cost
Debt	50.00%	4 271%	2.136%	1 559%
Equity	50.00%	9.400%	4.700%	4.700%
	100.00%		**6.836%**	**6.259%**

Construction Costs 3,290

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2700

July 20, 2022

EXHIBIT 2700 – SURREBUTTAL TESTIMONY – CUSTOMER COMMUNICATIONS

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Are you the same Cory Beck who previously provided Direct and Reply Testimony in this docket on behalf of Northwest Natural Gas Company ("NW Natural" or the "Company")?

A. Yes, I presented NW Natural/900, Beck and NW Natural/1900, Beck.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony is to respond to the Rebuttal and Cross-Answering Testimony of Greer Ryan, of Climate Solutions[1] (providing testimony on behalf of the Coalition[2]), in which Ms. Ryan provides the Coalition's objections to certain elements of the Multi-Party Stipulation Regarding Revenue Requirement, Rate Spread, and Certain Other Issues ("First Stipulation") that NW Natural, Staff of the Public Utility Commission of Oregon ("Staff"), the Oregon Citizens' Utility Board ("CUB"), the Alliance of Western Energy Consumers ("AWEC"), and the Small Business Utility Advocates ("SBUA") (collectively, the "Stipulating Parties") filed in this docket on May 31, 2022.

Q. Please summarize your testimony.

A. I disagree with a number of the Coalition's assertions supporting its objections to the Paragraph 1(l) of the First Stipulation, which addresses Advertising Expense. Importantly, I do not agree with the Coalition's calculation of its proposed reductions and have developed an alternative calculation demonstrating that,

[1] *See* Coalition/900, Ryan.

[2] The Coalition includes the Coalition of Communities of Color, Climate Solutions, Verde, Columbia Riverkeeper, Oregon Environmental Council, Community Energy Project, and Sierra Club.

when calculated using more granular and accurate data, the Coalition's proposed reductions total to less than the reduction of $1.0 million to NW Natural's advertising expense agreed upon by the Stipulating Parties in the First Stipulation. Furthermore, granting the Coalition's request to further reduce the Company's advertising expense would disturb the balancing of interests reflected in the totality of the First Stipulation. Accordingly, I recommend that the Commission reject the Coalition's requested reductions, and instead affirm the First Stipulation as appropriate to achieve a fair resolution of this case.

Q. Do you include any exhibits with your testimony?

A. Yes, I am presenting the following exhibits:

- NW Natural/2701, Beck – FERC Account Reclass 909 to 913;
- NW Natural/2702, Beck – Revised SDR 57 Showing Reclass;
- NW Natural/2703, Beck – Purchase Order for Affiliated Media Contract;
- NW Natural/2704, Beck – Supplemental Responses to Coalitions DRs 198 and 199; and
- NW Natural/2705, Beck - Alternative Calculation of RNG-related Salary and Overhead.

Q. Are there other NW Natural witnesses who address the Rebuttal and Cross-Answering Testimony of Greer Ryan?

A. Yes, the Surrebuttal Testimony of John Frankel and Mary Moerlins, NW Natural/2800, Frankel-Moerlins, responds to the Coalition's objections to Paragraph 1(m) of the First Stipulation (Customer Account and Sales Expense) and proposal to disallow costs associated with advertising that referenced shareholder incentives for gas appliances, as well as the Coalition's proposal to open an investigation regarding Energy Trust of Oregon incentives. Additionally, the Surrebuttal Testimony of Kimberly Heiting and Ryan Bracken, NW Natural/2400, Heiting-Bracken, responds to the Coalition's objection to Paragraph 1(n) (Salary, Wages, Stock Expense, Incentives, and Medical Benefits) and proposal to disallow all costs associated with the Company's Community Affairs and Government Affairs programs.

Q. Are the Stipulating Parties also filing Joint Reply Testimony to the Coalition's Objections to the First Stipulation?

A. Yes, the Stipulating Parties are also filing Joint Reply Testimony that responds to the Coalition's Objections to the First Stipulation. My Surrebuttal Testimony is intended to supplement the Stipulating Parties' Joint Reply Testimony and provide additional detail in response to the Coalition's assertions regarding advertising from NW Natural's perspective.

II. <u>ADVERTISING EXPENSE</u>

Q. What items were included in the First Stipulation?

A. The parties to the First Stipulation agreed to resolve all issues raised in these consolidated cases except for certain issues explicitly excluded in Paragraph 14 of the First Stipulation.[3] The agreed-upon and settled issues among the Stipulating

[3] First Stipulation at 11, ¶ 14. The excluded items included Residential Customer Deposits (CUB/100, Jenks), Line Extension Allowance (CUB/100, Jenks), Decoupling (Staff/1300, Scala), RNG Automatic Adjustment Clause (NW Natural/1500, Kravitz; AWEC/100, Mullins; CUB/200, Gehrke), Cost Recovery and Rate Spread of the Lexington RNG Project and Deferral (NW Natural/1100, Chittum; CUB/200, Gehrke; Staff/1700, Muldoon; AWEC/100, Mullins), and COVID-19 Deferral and Amortization and Rate Spread (Staff/1500, Dlouhy-Fox-Storm; CUB/200, Gehrke).

Parties included the Company's revenue requirement, cost of capital, rate spread and design, an attestation process for capital projects, implementation of depreciation rates pending resolution of docket UM 2214, Horizon 1 depreciation, amortization of the TSA Security Directive 2 deferral balance, removing the Company's request to begin amortizing the deferral of the Williams Pipeline Outage, an update to the billing determinants for the Company's Tariff Rate Schedules 183 and 197, an update to the Company's Tariff Rule 11, a cost study analysis of Tariff Rate Schedule 3 Non-Residential (Commercial), and a workshop relating to the difference in fixed costs for residential multi-family versus residential single-family dwellings, and, finally, the related tariff updates for these agreed-upon items.[4]

Q. Did the Coalition participate in the settlement discussions that resulted in the First Stipulation?

A. Yes. While the Coalition ultimately did not join the First Stipulation, the Coalition participated in all of the settlement discussions that occurred over the course of the month of May 2022 that led up to the First Stipulation.[5]

[4] *See* First Stipulation.

[5] NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/4. NW Natural, Staff, CUB, and AWEC (all of the parties to the case at the time) held a settlement conference regarding cost of capital on January 21, 2022, and on February 4, 2022, those same parties held a workshop addressing the Company's TSA Security Directive 2.

Q. Did the Coalition object to the First Stipulation?

A. Yes. On June 30, 2022, the Coalition filed Rebuttal and Cross-Answering Testimony of Greer Ryan Objecting to the Stipulated Settlement.[6]

Q. Did the Coalition object to all issues settled by the Stipulating Parties in the First Stipulation?

A. No. My understanding is that the Coalition objects to Paragraphs 1(l) (Advertising Expense),[7] 1(m) (Customer Account and Sales Expense), and 1(n) (Salary, Wages, Stock Expense, Incentives, and Medical Benefits).[8]

Q. Are you responding to all of these issues in your Surrebuttal Testimony?

A. No. I am responding only to the Coalition's objections to Paragraph 1(l) regarding the Company's advertising expense.

Q. Please describe the agreed-upon adjustment to the Company's advertising expense as reflected in Paragraph 1(l) of the First Stipulation.

A. As a result of their settlement discussions, the Stipulating Parties agreed to reduce the Company's advertising expense by $1.0 million.[9] In our Initial Filing,[10] NW Natural included $2,900,950 in advertising expense for the Test Year, which

[6] *See* Coalition/900, Ryan.

[7] NW Natural uses the term "customer communications," while other parties use the term "advertising." For sake of clarity and consistency with the First Stipulation, I will use the term "advertising" throughout this testimony.

[8] Coalition/900, Ryan/2-3.

[9] First Stipulation at 5.

[10] On December 17, 2021, NW Natural filed its request for a general rate revision (the "Initial Filing") to become effective on November 1, 2022 (the "Rate Effective Date").

includes both Category A[11] and Category B[12] advertising. Additionally, the Company budgeted $600,000 for Category C advertising expense in the Test Year, but did not includes these expenses in our request for a general rate revision, and did not book expenses for Category D or Category E for 2019-2021.[13] In short, the $1.0 million agreed-upon reduction to the Company's less-than $3 million proposal is significant.

Q. On what basis did the Stipulating Parties agree to this reduction to NW Natural's advertising expense?

A. While the Stipulating Parties have different views about the appropriate level of expense for advertising, the Stipulating Parties agreed that this significant reduction to the Company's expense for advertising—including a reduction to Category A down to the amount presumed reasonable under administrative rule and the removal of some Test Year expense for Category B—reflects a compromise among the Stipulating Parties and contributes to the overall fair resolution of this issue.[14] The Stipulating Parties also agreed that these reductions address the concerns raised by intervenors but still enable the Company to recover a reasonable advertising budget.[15]

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[11] NW Natural/1900, Beck/4. The Company requested $1,847,073 for Category A advertising.

[12] NW Natural/1900, Beck/5. The Company requested $1,080,000 for Category B advertising.

[13] Staff/1002, Jent (NWN Response to OPUC DR 152).

[14] NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/22-23.

[15] *Id*. at 23.

Q. Please provide a high level summary of the Coalition's objections to the First Stipulation relating to Paragraph 1(l) (Advertising Expense).

A. The Coalition argues that the proposed reduction to NW Natural's advertising expense agreed to in the First Stipulation is too low because it does not remove all costs that the Coalition argues are not recoverable as either Category A or Category B advertising expenses.[16] Specifically, the Coalition proposes disallowances of expenses related to the Company's Cooking with Gas, RNG, and indoor air quality advertisements, which advertisements the Coalition argues do not constitute Category A advertising.[17] Additionally, the Coalition argues that costs associated with NW Natural's safety-related booklets should not be recoverable as Category B advertising.[18] Finally, the Coalition asks the Commission to disallow 61 percent of the total salary cost from NW Natural's advertising budget to reflect the Coalition's estimate of salary time spent on RNG advertising.[19] In all, the Coalition proposes increasing the stipulated reduction to advertising expense from $1.0 million—as agreed upon by the Stipulating Parties—to $1,183,512, an incremental reduction of $183,512.[20]

[16] Coalition/900, Ryan/2.
[17] *Id*. at 31.
[18] *Id*. at 33.
[19] *Id.* at 32.
[20] *Id.* at 33.

Q. Please provide a high level response to the Coalition's objections to Paragraph 1(l) of the First Stipulation.

A. The Company—along with all Stipulating Parties[21]—recommends that the Commission view the agreements reflected in the First Stipulation as an integrated settlement and reject the Coalition's adjustment to Paragraph 1(l). The Stipulating Parties believe that when viewed in their totality, including the $1.0 million expense adjustment in Paragraph 1(l), the compromises contained in the First Stipulation are in the public interest and will result in just and reasonable rates.[22]

Q. Do you agree with the specifics of any of the Coalition's proposed reductions or the data on which the Coalition calculated those proposals?

A. No. I disagree with the Coalition's assertion that the proposed reduction to the Company's advertising expense in the First Stipulation is "too low"[23] because I disagree with several of the inputs the Coalition used to calculate its total proposed reduction. First, I disagree that it remains "unclear" whether NW Natural deducted the costs associated with its Cooking with Gas campaign[24] from its Category A budget.[25] As I have testified, the Company inadvertently provided some Category

[21] NW Natural, Staff of the Public Utility Commission of Oregon, the Oregon Citizens' Utility Board, the Alliance of Western Energy Consumers, and the Small Business Utility Advocates are collectively referred to as the "Stipulating Parties".

[22] *See* NW Natural-Staff-CUB-AWEC-SBUA/200, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/Section III.a.

[23] Coalition/900, Ryan/3.

[24] Although the Coalition refers to it as the "Cooking with Gas" campaign, the "Preference" advertising is the broader category classified as Category C advertising. Accordingly, throughout this testimony NW Natural refers to the discrete campaign and broader category as appropriate.

[25] Coalition/900, Ryan/4-5.

C communications when asked for Category A communications during the discovery phase of this case, but only one Preference communication was actually booked to Category A. The Cooking with Gas digital ads were charged to Category C.[26] Second, the Coalition incorrectly asserts that NW Natural is billing external vendor costs for Preference Advertising to customers.[27] Third, I disagree with the Coalition's request that the Commission require the Company to deduct all costs associated with advertisements the Company placed on Bing and Google[28] because some of these costs were appropriately charged to Category A expense. Finally, I disagree with the Coalition's proposal to remove the cost for staff time spent on RNG-related advertising, and even if the Commission were inclined to consider this proposal, the Coalition's calculation of the cost for staff time spent on NW Natural's RNG advertising is unreasonably high.[29] Thus, the Coalition's corresponding request to reduce $390,286 in salaries and overhead from the Company's Category A budget should be rejected, or at least further reduced.

Q. The Coalition references certain FERC accounts. Will you please identify the various FERC accounts utilized for advertising expense and whether each account is Category A, Category B, or Category C?

A. Yes. Please see Table 1.

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[26] NW Natural/1900, Beck/22.

[27] Coalition/900, Ryan/6.

[28] *Id*. at 18.

[29] *Id*. at 32.

Table 1 – FERC Accounts for Category A, Category B, Category C Advertising

Category	FERC #	Description
A	909-20000	Payroll / Overhead / PTO
A	909-21000	Bill inserts / Printing / Professional Services
A	909-23000	Utility Information / Printing / Professional Services / Postage
A	909-24000	Advertising - Informational and Instructional / Professional Services / Media
A	909-29000	Advertising - Telephone Directories / Media
B	909-28000	Advertising - Informational and Instructional - Safety / Professional Services / Media / Postage / Printing / Payroll / Overhead / PTO
C	913-20000	Payroll / Overhead / PTO / Dept. Expenses
C	913-22000	Advertising - Corporate Image - Districts / Professional Services / Media / Postage / Printing
C	913-26000	Advertising - Corporate Image / Professional Services / Media / Postage / Printing

Q. The Coalition also references FERC Accounts 908 and 912 in connection with advertising for natural gas appliance incentives.[30] Do you provide additional testimony addressing those issues?

A. No, the advertising addressed in my testimony is not charged to those accounts. John Frankel and Mary Moerlins will address those accounts in their Surrebuttal Testimony, NW Natural/2800, Frankel-Moerlins.

[30] Coalition/900, Ryan/33. Note that although the Coalition's testimony references FERC Accounts 408 and 412 and 908 and 912, the correct numbering for the accounts related to the Customer Account and Sales expense is 908 and 912.

A. Cooking with Gas Advertising Campaign

Q. Please describe the Coalition's objections to the Company's advertising expense related to its Cooking with Gas campaign.

A. The Coalition asks the Commission to disallow an additional $122,250 in media buying costs associated with NW Natural's "Preference" advertising campaign from the First Stipulation and an additional $124,221 in media production costs from the First Stipulation.[31] The Coalition argues that the "Preference" media buying costs of $122,250 should be disallowed because they represent money spent with an external vendor on promotional advertising that the Company is improperly booking as Category A expense instead of as Category C expense.[32] The Coalition also seeks a reduction of $124,221 for a single television advertisement related to Preference that the Company should have charged to Category C.[33]

Q. What is the Coalition's proposal regarding Preference advertising?

A. The Coalition asserts that all vendor receipts for Affiliated Media, LLC ("Affiliated Media") were billed to FERC Account 909 [34] and therefore the Coalition assumed that the entirety of the $122,250 in media buying costs was associated with the

[31] Coalition/900, Ryan/7.

[32] *Id*. at 4.

[33] *Id*. at 4-5, 7.

[34] Coalition/900, Ryan/6 (referencing Staff/1002, OPUC SDR Response No. 57 Attachment 1 (electronic spreadsheet)); *see* Coalition/901, Ryan/1, excerpts OPUC SDR Response No. 57 (documenting the entries in NW Natural's Response to Staff SDR 57 for receipts from Affiliated Media LLC).

Company's Preference campaign because the costs on the vendor contract appear under the heading "Product Preference."[35]

Q. Why does Ms. Ryan assert that these charges were booked to FERC Account 909?

A. In support of this assertion, Ms. Ryan references her Exhibit Coalition/901, Ryan which shows the Company's response to Standard Data Request ("SDR") 57, which was provided when the Company made its initial rate case filing in December 2021. I later discovered that there was an accounting mistake for Affiliated Media and reclassified $100,000 for preferences advertising from Category A to Category C. I have a revised accounting report that provides the record of the Affiliated Media costs moved from Category A to Category C, and have prepared an exhibit that shows the line items on SDR 57 response (provided in Coalition/901, Ryan) that were reclassified. Please see NW Natural/2701, Beck and NW Natural/2702, Beck.

Q. Did you also prepare another exhibit showing the cost allocation associated with the Affiliated Media account?

A. Yes. As shown in NW Natural/2703, Beck, the total value of the vendor contract with Affiliated Media is $750,000 and the costs of that contract are charged to three separate accounts to reflect the content of the advertisements. Of these costs, $142,250 represents Product Preference and Marketing advertising, and these

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[35] Coalition/900, Ryan/6.

costs are being charged to FERC Account 913, which is a Category C account.[36] In other words, the $122,250 "Product Preference" amount is captured in the $142,250 amount included on the Purchase Order shown in NW Natural/2703, Beck that is shown as being booked to FERC Account 913.

Q. What is your recommendation regarding the Coalition's proposed reduction to the media buying costs for the Preference advertising?

A. The Coalition's proposal to reduce the Company's advertising expense by $122,250 should be rejected because the Preference advertising costs at issue have already been booked to Category C.

Q. How do you respond to the Coalition's objection related to other advertising costs associated with the Cooking with Gas campaign?

A. I disagree with the Coalition's assertion that it is "unclear" whether NW Natural "deducted" the costs associated with its Cooking with Gas campaign from its Category A budget.[37] As I confirmed in my Reply Testimony, these communications—referenced by Ms. Ryan on pages 34-38 of her Opening Testimony—are, in fact, Category C expense for which the Company is not requesting recovery in this rate case.[38] As I stated in my Reply Testimony, the Company inadvertently provided these communications in response to a request for all Category A advertising in CUB DR 4.[39] The Company also provided

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[36] NW Natural/2703, Beck.

[37] Coalition/900, Ryan/4.

[38] NW Natural/1900, Beck/22.

[39] *Id*.

supplemental answers to Coalitions DRs 198 and 199 showing that these costs were in fact charged to Category C.[40] In other words, these costs were never booked to Category A and I therefore disagree with the Coalition that it is “unclear” whether NW Natural “deducted” these expenses from Category A. I do, however, agree that the Company should have charged the one Preference television advertisement media cost of $124,221 to Category C, consistent with my discussion of this issue in my Reply Testimony.

B. Bing and Google Advertisements

Q. Please describe the Coalition’s objections to the Company’s advertising expense related to its Bing and Google advertisements.

A. The Coalition recommends an additional reduction of $69,328 to the Company’s Category A advertising expense to address media costs related to Bing and Google advertisements regarding cooking with gas and indoor air quality.[41] The Coalition argues that the Commission should categorize NW Natural’s advertisements about indoor air quality related to the use of natural gas stoves as Category C promotional advertising[42] and proposes an adjustment to remove these costs.[43]

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[40] NW Natural/2704, Beck (Supplemental Responses to Coalitions DRs 198 and 199).

[41] Coalition/900, Ryan/31.

[42] *Id.* at 17; Coalition/400, Ryan/20-22.

[43] Coalition/900, Ryan/31.

Q. Do you agree with the Coalition's proposal to further reduce the First Stipulation by $69,328 for media buying costs related to Bing and Google advertisements about cooking with gas and indoor air quality?

A. No. The Coalition seeks to reduce the Company's Category A advertising expense by the total amount the Company spent on Bing and Google search advertising, but even accepting that the Cooking with Gas campaign should be booked as Category C, it would be inappropriate to eliminate all these costs because some of these advertisements were properly booked as Category A expenses. Specifically, approximately one third of the costs were related to indoor air quality and power outage tips, and two thirds to the Company's Cooking with Gas campaign. While NW Natural acknowledges that the Cooking with Gas costs constitute Category C advertising expense, as explained in detail in my Reply Testimony both the indoor air quality and power outage tips advertisements were properly considered Category A advertising expense.[44]

Q. How would revising the Coalition's proposed reductions for Bing and Google advertisements affect the Coalition's overall proposed reduction to the Company's Category A and Category B advertising expense?

A. The Company spent $69,328 for media buying costs related to Bing and Google advertisements. Based on the Company's position that one third of these costs were on advertising campaigns appropriately considered as Category A (indoor air quality, power outage tips), two thirds—or approximately $46,214—should be

[44] NW Natural/1900, Beck/19-20.

reduced from the Company's advertising expense. In other words, approximately $23,110 of the Coalition's proposed $69,328 reduction is not justified.

Q. Did the Coalition propose any other related adjustments?

A. Yes, the Coalition also proposed an adjustment in connection with the March 2021 Comfort Zone Newsletter because it included certain messaging regarding natural gas preference. The Coalition asserts that its adjustment would remove the entire cost of producing that newsletter—$20,561.

Q. Did you address this issue in your Reply Testimony?

A. Yes. As I explained in my Reply Testimony, the Oregon-allocated cost of the newsletter was $18,145, and of that amount I estimated that approximately $3,000 is attributable to the preference messaging.[45]

Q. Is the Company planning to update its process for coding costs associated with the Bing and Google advertising expense in the future?

A. Yes. Typically, the Bing and Google advertising expenses are booked to Category A because the content provides utility and helpful service information to the customers, along with other messages that may be of interest to the customer. Going forward, my department will more closely review the content of the advertisements and allocate costs to multiple account categories to ensure that the messages are being recorded to the appropriate account categories (Category A, Category B, Category C).

[45] *Id.* at 24.

C. RNG Advertising

Q. How do you respond to the Coalition's assertions that the Company's RNG advertising is misleading?

A. The Coalition is raising the same arguments that it raised in its Opening Testimony, which I addressed in detail in my Reply Testimony.[46] I maintain that the Company's advertising is truthful, accurate, and intended to educate our customers about RNG and the Company's decarbonization plans.

D. Safety Booklets

Q. How do you respond to the Coalition's assertions regarding the natural gas safety booklets produced by Culver Media?

A. In its Rebuttal Testimony, the Coalition is raising the same arguments that it raised in its Opening Testimony, which I addressed in detail in my Reply Testimony.[47] I maintain that the safety booklets are appropriately charged to Category B as a legally mandated safety expense to provide safety information to the "affected public" in compliance with RP-1162.

E. Indoor Air Quality and Gas Stoves

Q. How do you respond to the Coalition's assertions regarding gas stoves and indoor air quality?

A. As I discussed in my Reply Testimony, I disagree that advertising regarding indoor air quality and proper use of ventilation should be considered Category C

[46] *Id.* at 8-18.

[47] *Id.* at 25-33.

promotional advertising.[48] NW Natural's witnesses Kimberly Heiting and Ryan Bracken also respond to the Coalition's assertions regarding the Company's indoor air quality studies.[49]

F. RNG Advertising Salary and Overhead Expense

Q. Please describe the Coalition's objections related to salary and overhead costs associated with NW Natural's RNG advertising campaign.

A. The Coalition seeks to further reduce the Company's advertising expense by asking the Commission to disallow 61 percent of the total salary cost ($390,286) from NW Natural's advertising budget to reflect the Coalition's estimate of staff time and overhead allocated to RNG advertising.[50] The Coalition calculates this proposed reduction by asserting that the total costs for professional services, production and media for the Company's Category A advertising budget is $1,207,261[51] and alleging that professional services, production, and media for the institutional and promotional advertising described above accounts for 61 percent of these total Category A costs.[52] The Coalition then adjusts the Company's salary and overhead costs by 61 percent.[53]

[48] *Id*. at 18-19.

[49] NW Natural/1700, Heiting-Bracken/75; *see also* NW Natural/2400, Heiting-Bracken/28-30.

[50] Coalition/900, Ryan/32.

[51] *Id*.

[52] *Id*.

[53] *Id*.

Q. Do you agree with the Coalition's proposed deduction for salary and overhead costs associated with NW Natural's RNG advertising campaign?

A. No. As an initial matter, I disagree that any amount of the Company's salary and overhead expense associated with the RNG advertising should be disallowed. As I explained in my Reply Testimony, through its RNG campaign, the Company is providing customers with valuable information that addresses "environmental considerations" and "contemporary items of customer concern," which are squarely within the definition of Category A communications.[54] Second, even if the Commission were inclined to make an adjustment to salary and overhead costs associated with the RNG campaign, the Coalition's calculation is flawed and overstates the amount of staff time and overhead that would be allocated to RNG.

Q. Please elaborate regarding the flaws in the Coalition's assumptions about the amount of staff salaries and overhead costs allocated to RNG.

A. The Coalition arrived at its calculation that 61 percent of the Category A budget is associated with RNG by including costs that are *wholly unrelated* to RNG advertising and should therefore not be included in its calculation, such as media costs for publishing the customer service phone number, postage for delivering welcome kits to new customers, and regulatory items related to the new customer welcome kits.

[54] NW Natural/1900, Beck/9.

Q. Did you prepare an alternative calculation that would remove these amounts?

A. Yes. As shown in NW Natural/2705, Beck, the RNG costs comprise—at most—40 percent of the Company's Category A advertising budget. However, this is a conservative estimate, because it assumes that for the other cost categories that comprise the Category A budget, 100 percent would be allocable to RNG, when in fact it is more likely that about 50 percent to 75 percent of those costs would be allocable to RNG. However, because NW Natural does not track staff time for each advertising campaign, NW Natural provides the more conservative estimate.

Q. What would be the value of the adjustment using 40 percent instead of 61 percent?

A. A 40 percent reduction to NW Natural's Category A advertising budget for salary and overhead expense would equate to a reduction of approximately $253,112—or $137,173 less than the Coalition's proposed reduction.

Q. Please summarize the Coalition's proposed reductions to the First Stipulations Paragraph 1(l) and compare this to your alternative calculation of the same.

A. The Coalition proposed a total deduction of $1,183,512 from NW Natural's Category A and Category B advertising budgets—or, $183,512 in advertising expense in addition to the $1 million reduction to expense provided for in Paragraph 1(l) of the First Stipulation.[55] The Company substantively disagrees

[55] Coalition/900, Ryan/33.

with the Coalition's objections, including its arguments to reclassify certain advertising expenses—such as those related to RNG and indoor air quality—as Category C expenses. However, even if the Commission were to agree with the substance of the Coalition's objections, I have shown through my testimony that the Coalition's total proposed reduction would total to less than the $1 million reduction to expense provided for in the First Stipulation, even if the most conservative data are used, which is further illustrated in Table 2, below.

Table 2. Coalition's Proposed Adjustment with NW Natural's Corrections

Item Description	**OR Allocated Cost**	**NW Natural Adjusted**
Preference TV Production	$124,221	$124,221
Media buying costs	$122,250	$0
RNG Advertising	$381,906	$381,906
Indoor Air Quality Advertising	$15,000	$15,000
Bing/Google Search	$69,328	$46,214
Comfort Zone	$20,561	$20,561
Salary/Overhead Adjustment for RNG	$390,286	$253,112
School Safety Program	$60,000	$60,000
Total	**$1,183,552**	**$901,014**

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III. SUMMARY AND CONCLUSION

Q. Please summarize your position on the objections raised by the Coalition to the First Stipulation.

A. I recommend that the Commission reject the Coalition's objections to Paragraph 1(l) of the First Stipulation and proposed reductions to NW Natural's advertising expense as unnecessary, and adopt the First Stipulation as a fair and reasonable resolution of the issues addressed therein. The Stipulating Parties agree that the First Stipulation, if approved, would result in overall rates that are fair, just, and reasonable.[56] Importantly, the Coalition's proposed reductions—when adjusted to account for how NW Natural has categorized its advertising expenses—would result in a deduction that is **less than** the adjustment amount agreed upon by the Stipulating Parties and are therefore unnecessary. Furthermore, if not adjusted to account for how the Company has categorized its expenses, then the Coalition's proposal to reduce NW Natural's advertising expense beyond what the Stipulating Parties agreed was reasonable would jeopardize the Company's ability to cover its expenses and earn a fair return on its investments. In short, the First Stipulation adequately and appropriately resolves the Company's request to modify its revenue requirement related to its advertising expense, and the Commission should deny the Coalition's proposed modifications to the First Stipulation.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

[56] *See* NW Natural-Staff-CUB-AWEC-SBUA/200, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/Section III.a.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibits of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBITS 2701-2705

July 20, 2022

EXHIBITS 2701-2705 – CUSTOMER COMMUNICATIONS

Table of Contents

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2701

July 20, 2022

Data Entry View

Document Number	102637393	Company Code	5000	Fiscal Year	2021
Document Date	12/31/2021	Posting Date	12/31/2021	Period	12
Reference	JE 46-11	Cross-Comp.No.			
Currency	USD	Texts exist		Ledger Group	

CoCd	Item	PK	Text	Amount	Cost Center	Account	WBS element	Order	Description	Curr.	Tx	G/L A
5000	1	40	Reclass Adv. Exp to correct FERC	5,000.00	11550	505200		913-26000	ADVERTISING	USD		5052
	2	50	Reclass Adv. Exp to correct FERC	5,000.00-	11550	505200		909-26000	ADVERTISING	USD		5052
	3	40	Reclass Adv. Exp to correct FERC	10,000.00	11550	505200		913-26000	ADVERTISING	USD		5052
	4	50	Reclass Adv. Exp to correct FERC	10,000.00-	11550	505200		909-26000	ADVERTISING	USD		5052
	5	40	Reclass Adv. Exp to correct FERC	5,000.00	11550	505200		913-26000	ADVERTISING	USD		5052
	6	50	Reclass Adv. Exp to correct FERC	5,000.00-	11550	505200		909-26000	ADVERTISING	USD		5052
	7	40	Reclass Adv. Exp to correct FERC	40,000.00	11550	505200		913-26000	ADVERTISING	USD		5052
	8	50	Reclass Adv. Exp to correct FERC	40,000.00-	11550	505200		909-26000	ADVERTISING	USD		5052
	9	40	Reclass Adv. Exp to correct FERC	40,000.00	11550	505200		913-26000	ADVERTISING	USD		5052
	10	50	Reclass Adv. Exp to correct FERC	40,000.00-	11550	505200		909-26000	ADVERTISING	USD		5052

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2702

This exhibit is being filed in its native, Excel form.

July 20, 2022

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2703

July 20, 2022

Standard PO 4500032862 Created by Dianne Holmes

Standard PO 4500032862 Created by Dianne Holmes

Document Overview On | Print Preview | Messages | Personal Setting | Cancel | More | Exit

Standard PO 4500032862 Supplier 111413 AFFILIATED MEDIA LLC Doc. date 01/13/2022

Header

S..	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...	Matl Group	Plnt	Stor. Location	B
	10	K			2022 Media Cat A	374,750	EA	D	12/30/2022	1.00	USD	1	EA	Advertising	Oregon NW Natura...	250 Taylor	
	20	K			2022 Media Cat B	233,000	EA	D	12/30/2022	1.00	USD	1	EA	Advertising	Oregon NW Natura...	250 Taylor	
☑	30	K			2022 Media Cat C	142,250	EA	D	12/30/2022	1.00	USD	1	EA	Advertising	Oregon NW Natura...	250 Taylor	

Addl Planning

Item [30] 2022 Media Cat C

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment | Purchase Order History | Texts

AccAssCat Cost center Distribution Single account assignment CoCode Northwest Na...

Partial Inv. Derive from Account Assi...

S..	S..	Quantity	Perce	Net Value	Cost Ctr	G/L Acct	Order	Unloading Point	Recipient	D
	1	142,250...	0.0	0.00	11550	505200	913-26000			

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2704

July 20, 2022

NW Natural®

Rates & Regulatory Affairs
UG 435
Request for a General Rate Revision
Data Request Response

Request No.: UG 435 Coalition DR 198

198. Please describe the total costs during the Base Year related to all advertising about the benefits of gas utility service. See generally, Testimony of Greer Ryan at 32–37; Coalition's Exhibit 403 to the Testimony of Greer Ryan, at 4–6, 9–12; Exhibit 405 to the Testimony of Greer Ryan at 49. In your answer, please include all costs to prepare these advertisements including Salaries/Overhead, Professional Services, and Communications.

Response:

Advertising referenced in this section of Greer Ryan's testimony were mistakenly supplied as Category A examples for CUB DR 4 (See Coalition DR 197). Cooking and preference advertising is Category C. NW Natural is not seeking recovery of Category C advertising.

Supplemental Response:

After conferring with the Coalition on June 22, 2022 and June 23, 2022, NW Natural understands that the Coalition is seeking to confirm the accounting treatment of the Category C preference advertisements referenced in Cory Beck's Reply Testimony at page 22.

NW Natural provided detailed information regarding Category C expense in response to a data request from Staff, UG 435 OPUC DR 249 Attachment 1. This Excel file details the base year costs charged to Category C.

The Category C expenses that are specifically related to preference advertising are detailed below. These include the line-item costs for professional services, production, and media for the Category C advertising referenced that were correctly booked Category C, but mistakenly provided as Category A examples in response to OPUC 435 CUB DR 4, as described in the Beck Reply Testimony on page 22, starting at line 7. In some cases, the line item expense provided in UG 435 OPUC DR 249 Attachment 1 included more than one category of advertising (including some Category A or Category B advertising) or non-preference Category C advertising, and for those examples, the amount of preference advertising is broken out separately in the third column.

UG 435 OPUC DR 249 Attachment 1 ROW Number	UG 435 OPUC DR 249 Attachment 1 Line-Item Expense	Preference Advertising Expense from Line-Item Expense
176	$4,340	$4,340
183	$2,646	$2,646
186	$29,120	$5,600
191	$24,500	$24,500
194	$55,887.84	$20,720
201	$25,760	$1,680
207	$23,800	$21,700
225	$5,000	$5,000
226	$10,000	$10,000
227	$5,000	$5,000
228	$40,000	$40,000
229	$40,000	$40,000

Please reference UG 435 OPUC DR 152 Attachment 3 for the base-year line-item expense for the preference ad that was mistakenly charged to Category A and should have been charged to Category C as referenced in Cory Beck's Reply Testimony at page 22, starting at line 16.

Specifically:

UG 435 OPUC DR 152 Attachment 3 ROW Number	UG 435 OPUC DR 152 Attachment 3 Line-Item Expense	Preference Advertising Expense from Line-Item Expense
594	$140,760.20	$140,760.20

As NW Natural explained in response to Coalition DR 191, the Company does not track salaries/overhead by specific advertisements.

NW Natural

Rates & Regulatory Affairs
UG 435
Request for a General Rate Revision
Data Request Response

Request No.: UG 435 Coalition DR 199

199. Please describe the total costs during the Test Year related to all advertising about the benefits of gas utility service. See generally, Testimony of Greer Ryan at 32–37; Coalition's Exhibit 403 to the Testimony of Greer Ryan, at 4–6, 9–12; Exhibit 405 to the Testimony of Greer Ryan at 49. In your answer, please include all costs to prepare these advertisements including Salaries/Overhead, Professional Services, and Communications.

Confidential Response:

See NW Natural's Response to UG 435 Coalition DR 198.

Supplemental Response:

Please refer to UG 435 OPUC DR 274 Attachment 1 (tab 3) for the proposed test-year budget for Category C. Please note that specific costs for preference only advertising has not been identified, and at this time NW Natural has not developed a budget specific to preference advertising.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Exhibit of Cory A. Beck

CUSTOMER COMMUNICATIONS
EXHIBIT 2705

July 20, 2022

TOTAL CATEGORY A					Highlighted Should not be included in Ryan Analysis	Notes
Category A Channels		**Total Budget**		**OR Test Year**		
Salaries/Overhead	$	725,000	$	639,813	$ 639,813	
Bill inserts	$	282,500	$	249,306	$ 249,306	
Brochures/ Customer support Items	$	125,000	$	110,313	$ (110,313)	Should not be included for RNG. These items are regulatory items for welcome kits
eNewsletter	$	30,500	$	26,916	$ 26,916	
Professional Services - Design & Writing	$	100,000	$	88,250	$ 88,250	
Website support/development	$	30,000	$	26,475	$ (26,475)	Should not be included for RNG. Website functionality and tech support
Postage	$	85,000	$	75,013	$ (75,013)	Should not be included for RNG. Postage for delivering welcome kits to new customers
Media - Production	$	200,000	$	176,500	$ 176,500	
Media - IVR	$	10,000	$	8,825	$ 8,825	
Media - Telephone directory	$	30,000	$	26,475	$ (26,475)	Should not be included for RNG. Media only for publishing customer service phone number
Media - TV/Digital/Streaming	$	475,000	$	419,188	$ 419,188	
Category A Totals	$	2,093,000	$	1,847,073	$ 1,370,522	Total excluding highlighted items

CATEGORY A BUDGET SUMMARY					
Expense Category		**OR Test Year Budget**	**% of Total Budget**		
Salaries/Overhead	$	639,813	35%	$ 639,813	
Professional Services (design, writing, editing, postage)	$	366,238	20%	$ 163,262	
Communications (TV, digital, streaming, print, email)	$	841,023	46%	$ 567,447	
Total	**$**	**1,847,073**			
Coalition Witness Ryan's Position				**NW Natural RNG Adjustment**	Removes elements not related to RNG advertising
Professional Services (sum of B21& B22)	$	1,207,260		$ 730,709	Professional Services (sum of D21& D22)
Percent Salaries of Total Cat A Cost (B28/B24)		61%		40%	Percent Salaries of Total Cat A Cost (D28/B24)
NOTE calculated % of salary should be 65% (not 61%)					
Total Proposed Salary Deduction	$	390,286		$ 253,112	NWN Alternative Calculation of Coalition's Total Proposed Salary Deduction
				$ 137,173	Difference from Coalition Witness Ryan Position and NWN Alternative Calculation

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of John D. Frankel and Mary O. Moerlins

PROMOTIONAL CONCESSIONS AND INVESTIGATION REGARDING ENERGY TRUST OF OREGON INCENTIVES
EXHIBIT 2800

July 20, 2022

EXHIBIT 2800 – SURREBUTTAL TESTIMONY – PROMOTIONAL CONCESSIONS AND INVESTIGATION REGARDING ENERGY TRUST OF OREGON INCENTIVES

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Mr. Frankel, please state your name and position with Northwest Natural Gas Company ("NW Natural" or "Company").

A. My name is John Frankel. I am the Director of Marketing. As the Director, I am responsible for overseeing various administrative functions at NW Natural involving marketing, customer service and trade ally development. In my role, I am accountable for strategic planning, leadership of the marketing teams, and development of residential, industrial, and commercial marketing programs.

Q. Please summarize your educational background and business experience.

A. I received a Bachelor of Science degree in Business Administration from Oregon State University in 1986. I have been employed by NW Natural since 2005 and have been in my current position since March 2022. During my career, I have held various management positions in marketing, merchandising, operations, purchasing, and customer service.

Q. Ms. Moerlins, are you the same Mary Moerlins who previously provided Reply Testimony in this docket?

A. Yes, I presented NW Natural/2200, Moerlins and my qualifications are described in that exhibit.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of our Surrebuttal Testimony is to respond to the Rebuttal and Cross-Answering Testimony of Greer Ryan, of Climate Solutions[1] (providing testimony

[1] *See* Coalition/900, Ryan.

on behalf of the Coalition[2]), in which Ms. Ryan provides the Coalition's objections to certain elements of the Multi-Party Stipulation Regarding Revenue Requirement, Rate Spread, and Certain Other Issues ("First Stipulation") that NW Natural, Staff of the Public Utility Commission of Oregon ("Staff"), the Oregon Citizens' Utility Board ("CUB"), the Alliance of Western Energy Consumers ("AWEC"), and the Small Business Utility Advocates ("SBUA") (collectively, the "Stipulating Parties") filed in this docket on May 31, 2022. The Coalition proposes further reducing the expense associated with Paragraph 1(m) of the First Stipulation, Customer Account and Sales by $482,882, and opening an investigation of Energy Trust of Oregon ("Energy Trust") incentives to evaluate how they align with Oregon's climate policy.

Q. Please summarize your testimony.

A. We disagree with a number of the Coalition's assertions supporting its objections to Paragraph 1(m) of the First Stipulation, which addresses Customer Account and Sales. Importantly, we believe that the compromises reached in the First Stipulation are a fair balancing of interests and result in just and reasonable rates. Furthermore, granting the Coalition's request to further reduce the Company's Customer Account and Sales expense would disturb the balancing of interests reflected in the totality of the First Stipulation. Accordingly, we recommend that the Commission reject the Coalition's requested reductions, and instead affirm the First Stipulation as appropriate to achieve a fair resolution of this case.

[2] The Coalition includes the Coalition of Communities of Color, Climate Solutions, Verde, Columbia Riverkeeper, Oregon Environmental Council, Community Energy Project, and Sierra Club.

Additionally, we recommend that the Commission reject the Coalition's proposal to investigate how the Energy Trust incentives align with Oregon's climate policy as it relates to electric customers switching to natural gas, because NW Natural's data show electric to gas switching is occurring only nominally and is most likely not occurring as a result of the incentives.

Q. Are there other NW Natural witnesses who address the Rebuttal and Cross-Answering Testimony of Greer Ryan?

A. Yes, the Surrebuttal Testimony of Cory Beck, NW Natural/2700, Beck, responds to the Coalition's objections to Paragraph 1(l) of the First Stipulation (Advertising Expense). Additionally, the Surrebuttal Testimony of Kimberly Heiting and Ryan Bracken, NW Natural/2400, Heiting-Bracken, responds to the Coalition's objection to Paragraph 1(n) (Salary, Wages, Stock Expense, Incentives, and Medical Benefits) and proposal to disallow all costs associated with the Company's Community Affairs and Government Affairs programs.

Q. Are the Stipulating Parties also filing Joint Reply Testimony to the Coalition's Objections to the First Stipulation?

A. Yes, the Stipulating Parties are also filing Joint Reply Testimony that responds to the Coalition's Objections to the First Stipulation. Our Surrebuttal Testimony is intended to supplement the Stipulating Parties' Joint Reply Testimony and provide additional detail in response to the Coalition's assertions regarding customer account and sales expense from NW Natural's perspective.

II. CUSTOMER ACCOUNT AND SALES EXPENSE

Q. What items were included in the First Stipulation?

A. The parties to the First Stipulation agreed to resolve all issues raised in these consolidated cases except for certain issues explicitly excluded in Paragraph 14 of the First Stipulation.[3] The agreed-upon and settled issues among the Stipulating Parties included the Company's revenue requirement, cost of capital, rate spread and design, an attestation process for capital projects, implementation of depreciation rates pending resolution of docket UM 2214, Horizon 1 depreciation, amortization of the TSA Security Directive 2 deferral balance, removing the Company's request to begin amortizing the deferral of the Williams Pipeline Outage, an update to the billing determinants for the Company's Tariff Rate Schedules 183 and 197, an update to the Company's Tariff Rule 11, a cost study analysis of Tariff Rate Schedule 3 Non-Residential (Commercial), and a workshop relating to the difference in fixed costs for residential multi-family versus residential single-family dwellings, and, finally, the related tariff updates for these agreed-upon items.[4]

[3] First Stipulation at 11, ¶ 14. The excluded items included Residential Customer Deposits (CUB/100, Jenks), Line Extension Allowance (CUB/100, Jenks), Decoupling (Staff/1300, Scala), RNG Automatic Adjustment Clause (NW Natural/1500, Kravitz; AWEC/100, Mullins; CUB/200, Gehrke), Cost Recovery and Rate Spread of the Lexington RNG Project and Deferral (NW Natural/1100, Chittum; CUB/200, Gehrke; Staff/1700, Muldoon; AWEC/100, Mullins), and COVID-19 Deferral and Amortization and Rate Spread (Staff/1500, Dlouhy-Fox-Storm; CUB/200, Gehrke).

[4] *See* First Stipulation.

Q. Did the Coalition participate in the settlement discussions that resulted in the First Stipulation?

A. Yes. While the Coalition ultimately did not join the First Stipulation, the Coalition participated in all of the settlement discussions that occurred over the course of the month of May 2022 that led up to the First Stipulation.[5]

Q. Did the Coalition object to the First Stipulation?

A. Yes. On June 30, 2022, the Coalition filed Rebuttal and Cross-Answering Testimony of Greer Ryan Objecting to the Stipulated Settlement.[6]

Q. Did the Coalition object to all issues settled by the Stipulating Parties in the First Stipulation?

A. No. Our understanding is that the Coalition objects to Paragraph 1(l) (Advertising Expense),[7] 1(m) (Customer Account and Sales Expense), and 1(n) (Salary, Wages, Stock Expense, Incentives, and Medical Benefits).[8]

Q. Are you responding to all of these issues in your Surrebuttal Testimony?

A. No. We are responding only to the Coalition's objections to Paragraph 1(m) regarding the Company's Customer Account and Sales Expense.

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[5] NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/4. NW Natural, Staff, CUB, and AWEC (all of the parties to the case at the time) held a settlement conference regarding cost of capital on January 21, 2022, and on February 4, 2022, those same parties held a workshop addressing the Company's TSA Security Directive 2.

[6] *See* Coalition/900, Ryan.

[7] NW Natural uses the term "customer communications," while other parties use the term "advertising." For sake of clarity and consistency with the First Stipulation, we will use the term "advertising" throughout this testimony.

[8] Coalition/900, Ryan/2-3.

Q. Please describe Staff's review of the Company's Customer Account and Sales Expense.

A. Staff Witness Cohen, Staff/600, Cohen/17-26, performed a detailed review of customer account expense recorded in FERC accounts 901, 902, 903, 904, and 905, customer service expense recorded in FERC accounts 907, 908, and 910 (excluding 909 Informational and Instructional Advertising Expenses, which was analyzed by a different Staff witness), advertising, demonstration and selling, and miscellaneous sales expense recorded in FERC accounts 911-917. Staff proposed removing a total of $584,841 in the Test Year from NW Natural's customer account and sales expense related to building and industry events, corporate identity, dealer relations, and professional services.[9]

Q. Please describe the agreed-upon adjustment to the customer account and sales expense as reflected in Paragraph 1(m) of the First Stipulation.

A. As a result of their settlement discussions, the Stipulating Parties agreed to reduce the Company's FERC 908 and 912 customer account and sales expense by $292 thousand.[10] In its Initial Filing, NW Natural included $2.8 million for customer assistance expense (FERC Account 908) and $2.1 million for demonstration and selling expense (FERC Account 912).[11] The Stipulating Parties maintained different views regarding the amount of customer account and sales expense that NW Natural should include in its rates, but agreed that the $292 thousand expense

[9] NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/23-24.

[10] First Stipulation at 5.

[11] NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/23.

reduction reflected a compromise that contributed to a fair and reasonable resolution of the issues in this case.[12]

Q. Please provide a summary of the Coalition's objection to Paragraph 1(m) of the First Stipulation.

A. The Coalition recommends an additional reduction to FERC accounts 908 and 912 of $482,882 for NW Natural's customer account and sales expense to reflect costs related to advertising that referenced shareholder incentives for gas appliances.[13] The Coalition asserts that NW Natural has admitted that these costs must be categorized as Category C advertising even though the Company booked the expenses to FERC Accounts 908 and 912, which are paid for by customers.[14] Additionally, the Coalition asserts that NW Natural is using customer funds to promote fuel-switching to natural gas, and asks the Commission to open a new docket to align Energy Trust incentives and programs with Oregon's climate laws and Governor Brown's Executive Order 20-04.[15]

Q. What is included in the Coalition's proposed $482,882 adjustment to the marketing and advertising expense?

A. The adjustment is the total Oregon-allocated Test Year expense related to advertising that included shareholder incentives for appliances, and includes

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[12] *Id.* at 24.

[13] Coalition/900, Ryan/33.

[14] *Id*. Note that although the Coalition's testimony references FERC Accounts 408 and 412 and 908 and 912, the correct numbering for the accounts related to this category of expense is 908 and 912.

[15] Coalition/900, Ryan/34.

marketing program manager salary, program manager payroll overhead, agency fees, postage, and cooperative advertising.[16]

Q. How do you respond to the Coalition's proposed adjustment to remove additional marketing and advertising expense related to Customer Account and Sales?

A. We support the position articulated by the Stipulating Parties on this issue, and recommend that the Commission reject the Coalition's proposal. The First Stipulation is a balanced set of compromises on many issues that, in totality, results in fair and reasonable rates for customers.

Furthermore, NW Natural explained in the Company's response to UG 435 Coalition DR 203 that with respect to these materials, "[i]t is not accurate to characterize all of the content in the campaigns as connected only to the shareholder incentive. The content of the materials includes information about Energy Trust efficiency-based incentive measures, income-qualified Savings Within Reach offers, contractor discounts as well as the NW Natural shareholder-supported incentives."[17] Thus, while a portion of the advertising addresses the shareholder incentives, there is other information that is provided through this advertising, and it is reasonable for the Company to provide the entirety of offerings to potential consumers so that they can be fully informed of the economic choice they are making for their home energy needs.

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[16] *Id*. at 23; Coalition/919, Ryan/1 (Response to UG 435 Coalition DR 203).

[17] Coalition/919, Ryan/1 (Response to UG 435 Coalition DR 203).

Q. How do you respond to the Coalition's argument that certain advertising that is booked to FERC Accounts 908 and 912 should be classified as Category C advertising?

A. The Coalition raises a fair point regarding the classification of certain marketing materials as advertising, but we disagree that the entirety of the costs is related to Category C advertising, as noted above. In light of the confusion regarding which categories of advertising are booked to which FERC accounts, the Company plans to more closely examine the advertising expenses charged to FERC Accounts 908 and 912 to determine whether certain advertising should be regarded as Category A, B, or C advertising and should instead be booked differently.

Q. Have you performed that review as part of your Surrebuttal Testimony?

A. No. Unfortunately during the short window for Surrebuttal Testimony, there was not enough time to perform a comprehensive review and analysis of the advertising costs in FERC Accounts 908 and 912, however the Company plans to perform this review before filing its next rate case.

III. ENERGY TRUST INCENTIVE INVESTIGATION

Q. What is the Coalition's proposal regarding opening a new investigation at the Commission?

A. The Coalition recommends opening a new docket to "align [Energy Trust] incentives and programs with Oregon's new climate laws and Governor Brown's Executive Order No. 20-04 and ensure customers are getting the best information to save money, conserve energy, reduce emissions, and invest in innovative, cost-effective, and efficient technologies."[18]

Q. Why does the Coalition assert that such an investigation is needed?

A. The Coalition claims that NW Natural is using Energy Trust incentives to fuel-switch from electric to gas utility service by offering incentives for natural gas appliances that combine Energy Trust funded incentives with shareholder-funded incentives, and specifically comments that the combined incentives total to $3,000 to convert residential homes to gas powered appliances.[19]

Q. How do you respond to the Coalition's recommendation?

A. We believe the Coalition's recommendation to open a new investigation is unnecessary and should be rejected. The Energy Trust incentives are already aligned with Oregon's new climate laws and Governor Brown's Executive Order No. 20-04. The Energy Trust incentives promote the installation of higher efficiency equipment, which will necessarily result in carbon reduction and further the State's climate goals. Thus, there is no need to further "align" the Energy Trust incentives with the State's climate policy.

As described in the Reply Testimony of Kimberly Heiting and Ryan Bracken, an important element of the Company's plans for Climate Protection Program compliance is achieving carbon savings via energy efficiency.[20] As further explained by Ms. Heiting and Mr. Bracken, in 2019, NW Natural and its customers

[18] Coalition/900, Ryan/27.

[19] *Id.* at 28.

[20] NW Natural/1700, Heiting-Bracken/43.

provided funding that covered approximately $30 million of Energy Trust activities and generated nearly 5.5 million therms in energy savings.[21] The Company, in cooperation with the Energy Trust, will continue promoting the use of energy-efficient appliances, which will in turn further the Company's emissions reductions goals.

Furthermore, the Coalition is raising a new policy issue in its second round of testimony, which is not conducive, or even practically possible, to allow for a thorough examination of the issue. Generally, issues are expected to be narrowed through each round of testimony -- not expanded. As a practical matter, these new issues do not promote judicial efficiency and should be raised earlier in the case while there is an opportunity to resolve them in the settlement process. NW Natural has already agreed to a settlement that included customer account and sales expense, and we are bound to support that settlement, which expressly narrowed the issues in the case.

Q. Has the Commission previously investigated whether Energy Trust incentives motivate fuel switching?

A. Yes. In 2011, the Commission opened an Investigation of Fuel Switching and Cross Fuel Energy Issues seeking to determine whether incentives offered by the Energy Trust for electric heat pumps were resulting in fuel switching from natural gas to electric energy.[22] In that docket, the Commission concluded that there were

[21] *Id.*

[22] *In re Public Utility Commission of Oregon, Investigation of Fuel Switching and Cross Fuel Energy Issues*, Docket UM 1565, Order No. 13-104 at 1 (Mar. 27, 2013).

multiple factors that influence a customer's decision to switch from gas service to electric, but that there was no conclusive evidence that the incentive is the primary reason for switching.[23] The Commission subsequently commissioned a third-party study to ascertain whether the Energy Trust incentive was the primary factor motivating fuel-switching, and that study concluded that there was no support for a finding that Energy Trust incentives were the primary reason for any fuel switching that has occurred.[24]

Q. As a practical matter, is fuel-switching from electric to natural gas actually occurring as a result of the Energy Trust incentives that are being provided?

A. No. NW Natural examined its 2021 data for the Energy Trust Savings Within Reach incentive—which is the primary ETO incentive for space heating appliances—and found that the uptake for electric customers was quite low. While there were a small number of electric customers that switched to gas in 2021, the total represented only 3.68 percent of the customers that took advantage of the incentive. Our analysis is presented in Table 1 below.

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[23] *Id.* at 5.

[24] *In re Public Utility Commission of Oregon, Investigation of Fuel Switching and Cross Fuel Energy Issues*, Docket UM 1565, Order No. 15-265, App. A at 5 (Sept. 8, 2015).

Table 1. Analysis of 2021 Incentive Uptake for Savings Within Reach.

2021 Savings Within Reach - Gas customers		
Prior Heat Source	**Sum of Qty**	**% of Total**
Electric Baseboard	1	0.07%
Electric Baseboard Heat	8	0.59%
Electric Furnace	30	2.21%
Electric Wall Heater	2	0.15%
Radiant Ceiling Heat	1	0.07%
Heat Pump	8	0.59%
Total Electric	**50**	**3.68%**
Gas Furnace	1249	91.97%
Oil Heater	55	4.05%
Grand Total	**1358**	

Q. For the electric customers that took advantage of the incentives, do you know whether they fully switched to natural gas or became a dual-fuel home?

A. The data were not clear on this point, but we note that in the 2015 Staff Memo summarizing the third-party investigation in Docket UM 1565, Staff notes that many premises that add a new source become dual-fuel (i.e. hybrid) heated homes—keeping the existing space heat source.[25] Thus it is fair to assume that at least some of the 50 electric customers listed above may have transitioned to a dual-fuel system.

[25] *Id.* at App. A at 3.

Q. Of those 50 electric customers that used the incentive, how many had an electric heat pump?

A. Only eight of those 50 electric customers had an electric heat pump. The remainder were using electric resistance heating, which as the Company explained in NW Natural/1700, Heiting-Bracken/17-21, is often more carbon-intensive than gas heating given the relative emissions intensity of the electric sector in Oregon and particularly given the inefficiency of electric resistance heating.

Q. How do you respond to the Coalition's assertion that a new investigation is needed to consider whether Energy Trust incentives align with Oregon's new climate laws and Governor Brown's Executive Order No. 20-04?

A. For the reasons described above, we do not believe an investigation is warranted.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UM 435 / UG 411

NW Natural

Surrebuttal Testimony of Anna K. Chittum

LEXINGTON RNG PROJECT
EXHIBIT 2900

REDACTED

July 20, 2022

EXHIBIT 2900 – SURREBUTTAL TESTIMONY– LEXINGTON RNG PROJECT

Table of Contents

I. INTRODUCTION AND SUMMARY

Q. Are you the same Anna Chittum who filed Direct and Reply Testimony in this proceeding on behalf of Northwest Natural Gas Company ("NW Natural" or the "Company")?

A. Yes, I presented NW Natural/1100, Chittum and NW Natural/2100, Chittum.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my Surrebuttal Testimony is to respond to testimony filed on June 30, 2022, by the Public Utility Commission of Oregon Staff ("Staff") and the Alliance of Western Energy Consumers ("AWEC"). I will respond to issues presented in the testimony of Staff witness Matthew Muldoon (Staff/1800, Muldoon) and AWEC witness Bradley Mullins (AWEC/200, Mullins).

Q. Please summarize your testimony.

A. Although both Staff and AWEC agree that the Lexington renewable natural gas ("RNG") project is prudent, they raise several concerns that I address in my testimony. Specifically, I respond to several Staff concerns regarding future RNG procurements, and to an issue that AWEC continues to raise regarding distributions to the project's co-developer, BioCross. Other issues that AWEC raised concerning the revenue requirement and the rate spread of the Lexington RNG project are addressed in the Surrebuttal Testimony of Kyle Walker and Robert Wyman (NW Natural/3000, Walker-Wyman).

II. RESPONDING TO STAFF'S REBUTTAL TESTIMONY

Q. In its Rebuttal Testimony, does Staff make a recommendation concerning the Lexington RNG project?

A. Yes. Staff recommends that the Commission find that the Lexington RNG project is prudent and authorize rate recovery under ORS 757.390-398 ("SB 98").[1]

Q. Although Staff states the Lexington RNG project is prudent, it believes that the Company should prioritize RNG projects in Oregon in the future.[2] How do you respond?

A. NW Natural's strategy is to acquire least cost/least risk RNG regardless of location of the resource. To assist NW Natural in achieving this goal, the Company has developed a methodology by which it can evaluate proposed investments in RNG infrastructure and purchases of RNG on an apples-to-apples basis.[3] This methodology incorporates the costs associated with the risks and benefits of any particular project. Notably however, the model does not assign additional costs to an out-of-state project because the Company does not perceive additional risk or additional benefit arising from the simple fact that a project is (or is not) located out-of-state. The Company is concerned that prioritizing in-state projects could

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[1] Staff/1800, Muldoon/28.

[2] *Id.* at 7-8, 14.

[3] *See* NW Natural/1100, Chittum/33-39 (description of the Company's incremental cost methodology). Calculating the incremental cost of RNG is required under OAR 860-0150-200 and the Commission approved it for that purpose. *In the Matter of Public Utility Commission of Oregon, Investigation into the Use of Northwest Natural's Renewable Natural Gas Evaluation Methodology*, Docket UM 2030, Order No. 20-403 (Nov. 5, 2020). The Company has since incorporated into the methodology a risk-adjustment metric for evaluating resources established in its 2018 IRP.

increase the costs of RNG to our customers, raising prudence issues. For this reason, absent Commission guidance to the contrary, NW Natural would not plan to acquire in-state resources unless our modeling indicates that they are least cost and least risk as compared to other available resources.

That said, NW Natural understands, and in fact shares, Staff's preference for developing and supporting in-state projects. For that reason, the Company is actively pursuing and evaluating in-state projects and will acquire them, as long as they compare favorably to alternatives.

Q. Some of Mr. Muldoon's comments suggest that Staff believes that out-of-state projects are inherently riskier than in-state projects. In particular, Mr. Muldoon states that the Lexington RNG project has "exceedingly complex business relationships and dynamics, as well as incremental costs related to being remotely managed by third parties that require incentives and risk controls."[4] Please respond to Mr. Muldoon's concerns.

A. Regardless of whether the RNG project is located in Oregon, NW Natural anticipates that many of its RNG projects will include business structures that offer incentives or economic benefits to potential development partners, and that these business structures may be somewhat complex, though not any more complex than the business structures of various other types of energy development projects. Developers undertake much of the initial evaluation of new opportunities throughout the RNG industry, and then seek providers of capital as well as buyers

[4] Staff/1800, Muldoon/18.

of the gas to make a project come to fruition; this is why NW Natural is regularly contacted by a wide variety of developers with project opportunities. Every one of these developers conducts this early-stage origination and development work with the understanding that an entity will pay them for this work in the future, if successful, and that they will likely have a long-term financial stake in a project. This is why developer-held equity stakes in RNG projects (as in the Lexington RNG project) are in fact the norm in the industry. In order to participate in any RNG project brought to NW Natural by a developer, NW Natural anticipates it will need to be able to work with third-party developers and structure business arrangements that offer them some equity position. This is true regardless of the location of the project and does not add any additional risk to the underlying RNG project.

NW Natural does undertake some project origination and development work by itself. In some cases, NW Natural expects this work to result in RNG projects that include no additional third-party developer, and NW Natural will instead play the developer role (e.g., securing initial feedstock agreements, conducting initial technical analysis, and evaluating pipeline access). However, there is no possible way that NW Natural staff can identify and pursue all desired cost-effective RNG opportunities around the country, and for this reason, the Company needs and expects to continue to work with third-party developers that have undertaken the important early-stage development work necessary to be able to assess whether an RNG project is viable or not.

Q. Mr. Muldoon also states that geographic delivery of natural gas into interstate pipelines can raise problems because there is "no cost-effective or practical way to transport RNG to Oregon or back off current Oregon brown gas consumption."[5] Please respond to Mr. Muldoon's concerns.

A. I appreciate Mr. Muldoon's concerns, but the Company would propose to develop future out-of-state projects similarly to our approach with Lexington. That is, we will not actually transport the physical gas to our service territory. Rather NW Natural will retire the environmental attributes of such gas—the renewable thermal credits—on behalf of our customers and sell the physical gas to third parties. Additional revenue from these sales of physical gas offset the cost of the project to customers. Therefore, the problems that Mr. Muldoon has raised would not be an issue. NW Natural has existing relationships with many gas buyers, and we have leveraged that expertise and will continue to do so in order to execute prudent agreements to sell the gas from these projects.

Q. Mr. Muldoon also notes that pursuit of more geographically remote projects eliminates some of the value that RNG could bring to Oregon—including the opportunity to create an "RNG business cluster."[6] What is your response?

A. As noted above, NW Natural appreciates and shares Staff's support for economic development here in Oregon, and all things being equal, the Company would prefer in-state projects. We have received no indication that the Commission

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[5] Staff/1800, Muldoon/19.

[6] *Id.*

would like to see NW Natural incorporate additional externalities, such as local economic development benefits, into its economic modeling, but again, all else equal, the Company would prefer in-state projects.

Q. Staff also raises concerns regarding "possibly overly complex business relationships" that it claims, "minimized risk to NW Natural Holding Company, though not necessarily minimizing cost and risk to Oregon ratepayers."[7] Do you believe this is an accurate characterization?

A. No. As I stated in my Direct Testimony, the structure of the Lexington RNG project protects both NW Natural and its customers. NW Natural developed the project through an affiliate, Lexington Renewable Energy LLC. Because Lexington Renewable Energy LLC is its own legal entity, its creditors and counterparties would only be able to access Lexington Renewable Energy LLC's assets and not the utility assets of NW Natural, thereby protecting both the Company and its customers.[8]

In addition, as pointed out by Staff, NW Natural agreed to numerous conditions concerning the affiliates it formed to pursue the Lexington RNG project—NW Natural RNG Holding Company, LLC and Lexington Renewable Energy LLC.[9] These conditions ensure that Lexington Renewable Energy LLC and NW Natural RNG Holding Company, LLC are both subject to: 1) regulatory

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[7] *Id.* at 7.

[8] NW Natural/1100, Chittum/14.

[9] Staff/1800, Muldoon/8-9. For a description of how the Lexington RNG project is structured, see NW Natural/1100, Chittum/20-23.

oversight of potential environmental risks in the same manner as NW Natural, and 2) regulatory oversight regarding other general risks in the same manner as NW Natural.[10] Further, there are regulatory controls that, among other things, require Commission approval before Lexington Renewable Energy LLC could engage in certain financial transactions, and information sharing conditions that require NW Natural to respond to requests for information related to the construction and operation of the Lexington biogas facility in the possession of NW Natural RNG Holding Company, LLC and Lexington Renewable Energy LLC, in the same manner as NW Natural.[11] Finally, there is a price cap that limits the amount that NW Natural can recover in rates.[12]

NW Natural continues to believe that these are all significant protections for its Oregon customers.

Q. Staff believes that NW Natural will require "multiple approaches," not just acquiring RNG and hydrogen, to achieve decarbonization.[13] Do you agree?

A. Yes. As explained in the Reply Testimony of Kim Heiting and Ryan Bracken, NW Natural continues to believe that energy efficiency will play a major role in achieving decarbonization.[14] However, as Staff correctly points out, no single

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[10] *In the Matter of Northwest Natural Gas Company, dba NW Natural, Request for Approval of an Affiliated Interest Agreement with Lexington Renewables, LLC*., Docket UI 451, Order No. 22-211, App. A at 1-2 (June 6, 2022).

[11] *Id.* at App. A at 14.

[12] *Id.* at 2.

[13] Staff/1800, Muldoon/13.

[14] *See* NW Natural/1700, Heiting-Bracken/46-56.

measure, including energy efficiency, can be relied on to achieve decarbonization. Instead, NW Natural is pairing energy efficiency with the acquisition of RNG (including hydrogen), to decarbonize its system. As stated in my Reply Testimony, NW Natural continues to believe there is a sufficient supply of RNG, including hydrogen, which is essentially unlimited in terms of feedstock.[15] But the Company's energy efficiency strategy will reduce the amount of RNG that the Company needs to acquire in the future, relative to how much RNG would need to be acquired absent additional energy efficiency.

Q. Although Mr. Muldoon states that Staff believes the Lexington RNG project is prudent, he also states that RNG, in general, is "extravagantly priced."[16] What is your response?

A. NW Natural acknowledges that RNG is more expensive than conventional natural gas at this time and it is pursuing efforts to reduce overall customer demand, which also reduces commodity costs, regardless of whether those costs are associated with conventional natural gas or RNG. However, the Company does not believe it is appropriate to call RNG "extravagantly priced" or to compare it to an expensive Mercedes electric sedan.[17] Instead, RNG, including hydrogen, should be viewed as a nascent market that is still in its very early stages, which is quite different from the well-defined, albeit limited, market for luxury vehicles. Nonetheless, the

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[15] NW Natural/2100, Chittum/4-6.

[16] Staff/1800, Muldoon/15.

[17] *Id.*

Company is, of course, very concerned with affordability and has utilized the flexibility inherent in SB 98 and the Climate Protection Program to pursue RNG acquisitions that are available at the lowest risk-adjusted incremental cost, even if those projects are located outside of Oregon. This flexibility is an important tool in keeping costs as low as possible and should not be disregarded.

Q. Staff appears to be concerned that, to the extent the Company enters into future RNG investments that are similar to the Lexington RNG project, the Company will not develop expertise that could be used to lower RNG costs and risks.[18] Do you believe that this is a valid concern?

A. No. NW Natural's Renewable Resources team has gained valuable experience with the Lexington RNG project that is applicable to all future RNG projects, regardless of location or business structure. For instance, we have learned about: the operation of different types of cleaning and conditioning equipment; the considerations and opportunity for cost savings available during construction and commissioning; how to better evaluate potential gas production and isolate variables that impact production; how to hire on-the-ground contractors for daily operations; how to work with third-party gas marketers to successfully access markets for the physical gas; how to time equipment upgrades, replacements, and maintenance to minimize impact on project operations; and how to develop specifications for flares, compressors, and membrane gas conditioning systems. This experience and growing expertise are applicable and valuable at any RNG

[18] *See* Staff/1800, Muldoon/18-20.

project located anywhere in the country and are not impacted by the business structure underlying the project. NW Natural will always be working with third-party providers of feedstock, equipment vendors, construction companies, and operators.

In addition, NW Natural has gained valuable experience that will benefit its customers in the event the Company develops future projects with Tyson. NW Natural has learned how to best integrate with Tyson's wastewater treatment plants and staff, how to better share data between systems, and how to better evaluate the biological composition of Tyson's lagoons. And, by working with the same engineering, procurement and construction (EPC) contractor, NW Natural will save time working through contractual issues and the manner in which data and information are to be shared, the process to bring issues of concern to all project partners, and the appropriate times to leverage external third-party engineering experts.

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III. RESPONDING TO AWEC'S BIOCROSS CONCERN

Q. In its Rebuttal Testimony, AWEC continues to argue that the amount that NW Natural pays BioCross should be limited, stating that the Company "is being compensated for the capital at risk in the project by earning its rate of return on 100% of the project assets, even though it only owns a fraction of that amount."[19] What is your response?

A. At the outset, I want to reiterate two points I made in my Reply Testimony: (1) BioCross brought this deal to NW Natural and BioCross would not have agreed to partner with NW Natural unless it was granted the equity share it received; and (2) the Lexington project, as structured and including the profits paid to BioCross, was the best deal for our customers.[20] Given these points, NW Natural's agreement to grant BioCross an equity share was entirely prudent, and customers would have been harmed if NW Natural had refused to grant BioCross an equity share and, as a result, the Company pursued a different RNG project. Second, contrary to AWEC's suggestion,[21] NW Natural is proposing to rate base only the capital that it invested in the project, which is approximately $9.5 million for the Test Year. This investment enabled NW Natural, acting through its affiliates, to co-own the project with BioCross. Under ORS 757.396(3), NW Natural is entitled to its "cost of capital

[19] AWEC/200, Mullins/13.

[20] NW Natural/2100, Chittum/19.

[21] AWEC/200, Mullins/12-13.

established by the commission in the large natural gas utility's most recent general rate case," and that is what the Company is seeking here.

Q. Why is it that NW Natural cannot simply own 100 percent of the project as suggested by AWEC[22]?

A. As stated in my Reply Testimony, NW Natural needed BioCross to develop the Lexington RNG project.[23] BioCross put the initial project concept together, secured the initial relationship and feedstock agreement with Tyson, and conducted the initial evaluation of the gas potential and equipment costs, well before NW Natural was ever aware of the Lexington facility.[24] In addition, a buy-out of BioCross' interest, as suggested by AWEC, would have resulted in BioCross profiting from the project up front, whether it was successful or not.[25] NW Natural does not believe that this approach would have been in the best interest of our customers.

Q. In its Rebuttal Testimony, AWEC states that if NW Natural managed the project directly, then it would not be necessary to provide a rate of return to BioCross.[26] Is this correct?

A. No. BioCross is an equity owner of the Lexington RNG project and, as explained above, was vital in ensuring that the project was completed. As a partial equity

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[22] AWEC/200, Mullins/12.

[23] NW Natural/2100, Chittum/19.

[24] *Id.*

[25] *Id.*

[26] AWEC/200, Mullins/13-14.

owner, it bears the risks of the project, even if NW Natural managed the project directly. That said, as stated in my Direct Testimony, there is an additional benefit to BioCross sharing in the risk of the project, which is that it appropriately incentivizes the project manager—an affiliate of BioCarbN, which is a part-owner of BioCross[27]—to manage the project in a way that reduces costs and increases RNG production.[28]

Q. AWEC states that BioCross is entitled to a "preferential" rate of return.[29] Do you agree?

A. No. Unlike NW Natural, BioCross does not necessarily receive a rate of return if the project is prudently built and operated.[30] Instead BioCross' distributions are **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL**]. Since BioCross agreed to **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]** the amount of distributions it receives when the project is prudently operated but **[BEGIN HIGHLY CONFIDENTIAL]** [redacted]

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[27] *See* NW Natural/1100, Chittum/11-13 (describing the Lexington RNG project's ownership structure).

[28] NW Natural/1100, Chittum/17-18. NW Natural also notes that it retains the ability to select a different project manager if circumstances warrant.

[29] AWEC/200, Mullins/13-14.

[30] ORS 757.394; ORS 757.396.

[redacted] **[END HIGHLY CONFIDENTIAL]**, then it is also equitable to have BioCross receive distributions when the project is producing RNG at **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UG 435 / UG 411

NW Natural

Surrebuttal Testimony of
Kyle T. Walker and Robert J. Wyman

LEXINGTON RNG PROJECT COST OF SERVICE AND RATE SPREAD
EXHIBIT 3000

July 20, 2022

EXHIBIT 3000 - SURREBUTTAL TESTIMONY – LEXINGTON RNG PROJECT COST OF SERVICE AND RATE SPREAD

Table of Contents

I. INTRODUCTION, SUMMARY AND STIPULATION

Q. Are you the same Kyle Walker and Robert Wyman who filed Direct and Reply Testimony in this proceeding on behalf of Northwest Natural Gas Company ("NW Natural" or the "Company")?

A. Yes, we presented NW Natural/1300, Walker, NW Natural/1400, Wyman, and NW Natural/2300, Walker-Wyman. In addition, Mr. Wyman co-sponsored Joint Testimony in Support of Second Partial Stipulation, NW Natural-Staff-CUB-AWEC-Coalition/100, Kravitz, Wyman, Fjeldheim, Scala, Jenks, Mullins, and Fain.

Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of our Surrebuttal Testimony is to respond to AWEC's Rebuttal Testimony regarding the Lexington RNG Project's cost of service and rate spread issues.

Q. Does the Second Stipulation reached by parties narrow the issues from your Reply Testimony?

A. Yes. NW Natural, Staff of the Public Utility Commission of Oregon ("Staff"), the Oregon Citizens' Utility Board ("CUB"), the Alliance of Western Energy Consumers ("AWEC"), and the Coalition of Communities of Color, Climate Solutions, Verde, Columbia Riverkeeper, Oregon Environmental Council, Community Energy Project, and Sierra Club ("Coalition") (collectively, the "Stipulating Parties") reached a settlement on decoupling and COVID-19 deferral rate spread, and certain other issues (the "Second Stipulation"), which was filed with the Commission on June 29, 2022.

Q. What issues from NW Natural/2300, Walker-Wyman were not included in the Second Stipulation, and therefore, are addressed in this Surrebuttal Testimony?

A. The issue remaining from NW Natural/2300, Walker-Wyman is the Lexington RNG Project cost of service and rate spread.

II. LEXINGTON RNG PROJECT COST OF SERVICE AND RATE SPREAD

Q. In Rebuttal Testimony, AWEC reasserts its position that the Lexington RNG Project was acquired under SB 98,[1] and therefore any cost of service and rate spread treatment must be consistent with that law which provides no authority to allocate costs to transportation customers. Do you agree?

A. No, we do not. As described in Reply Testimony NW Natural/2300, Walker-Wyman, the Company believes that regardless of its original purpose to meet SB 98 sales targets,[2] the Lexington RNG Project benefits transportation customers because it can also be used for CPP compliance.[3] Since transportation customers benefit from the Lexington RNG Project, they should be expected to pay a share of the cost.

Q. What are other parties' positions on whether the costs of the Lexington RNG Project should be allocated to transportation customers?

A. Staff believes that transportation customers should be allocated costs of the Lexington RNG Project and does not agree with AWEC's interpretation of SB 98.

[1] ORS 757.390-398.

[2] ORS 757.396.

[3] NW Natural/2300, Walker-Wyman/5-6, 8.

Staff indicates it will address this issue later in briefs.[4] CUB also disagrees with AWEC's position and agrees with the Company "that the RNG it has procured to date will help it comply with all applicable climate regulations."[5] CUB also indicates it will address this issue further in briefing. The Coalition and the Small Business Utility Advocates ("SBUA") have not filed any testimony on whether transportation customers should be allocated the costs of the Lexington RNG Project.

Q. Please summarize the Company's position on rate spread with regards to the Lexington RNG Project.

A. The Company proposes to spread the revenue requirement associated with the Lexington RNG Project on an equal cents per therm basis to all customer classes, including its customers with special contracts. As described in the Reply Testimony NW Natural/2300, Walker-Wyman, the final rules in Oregon's Climate Protection Program ("CPP") make NW Natural the single point of regulation for all emissions associated with customers taking natural gas service on its distribution system.[6] Therefore, all customers should pay to decarbonize the product moving through the Company's distribution system.[7] Because CPP compliance is based on carbon dioxide emissions associated with therms of natural gas consumed, it makes sense to allocate cost in the same way (i.e., equal cents per therm).[8]

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[4] Staff/1800, Muldoon/18.

[5] CUB/500, Gehrke/3.

[6] NW Natural/2300, Walker-Wyman/4, lines 13-15.

[7] *Id*. at 4, lines 15-17.

[8] *Id*. at 8, lines 19-20.

Q. What are parties' positions on rate spread with regards to the Lexington RNG Project?

A. Both CUB's and Staff's positions align with the Company's. The Coalition and SBUA have not filed any testimony on this topic. AWEC opposes the Company's, CUB's, and Staff's position, and proposes a rate spread allocation that is consistent with the overall rate spread for all other revenue requirement items as presented in Appendix B to the First Stipulation.[9] AWEC further argues that no costs associated with the Lexington RNG Project be allocated to special contract customers in this proceeding.[10]

Q. In Reply Testimony NW Natural/2300, Walker-Wyman, the Company stated that AWEC had proposed the Lexington RNG Project be spread on an equal percent of margin basis. In Rebuttal Testimony AWEC/200, Mullins, AWEC states that the Company incorrectly asserted its position.[11] How do you respond?

A. The Company was responding to AWEC's Opening Testimony AWEC/100, Mullins, which recommends the following: (1) "that the Lexington RNG Project revenue requirement be included as a base rate surcharge in the overall rate spread approved in this proceeding"; (2) "that no costs, or benefits, be allocated to transportation customers, consistent with the requirements of SB 98"; and (3) "that the cost be spread on an equal percent of margin basis, rather than an equal cents

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[9] AWEC/200, Mullins/5.

[10] *Id*. at 7.

[11] *Id.* at 4.

per therm basis."[12] Although AWEC contends that the Company "mischaracterized or misunderstood" its testimony,[13] AWEC's current recommendation that the cost allocation "be considered in the context of the overall cost of service study used to establish the rate spread in this proceeding",[14] contradicts its prior recommendations (2) and (3) above, since the overall rate spread neither avoids allocating costs to transportation customers nor is it based simply on an equal spread across margin revenues.

Q. AWEC recommends that the cost of the Lexington RNG Project be considered in the context of the overall cost of service and rate spread.[15] Do you agree?

A. No. In Reply Testimony, we noted that "[w]ith the CPP compliance costs, cost causation is tied not to the direct and indirect costs of provisioning safe and efficient service for our customers, but rather it is tied directly to emissions associated with natural gas consumption."[16] We believe that the scope of the Long-Run Incremental Cost study ("LRIC study") is limited to the known and measurable costs associated with the assets and operations expenses that allow the Company to safely and efficiently meet the distribution and design day capacity needs of its core natural gas customers. The costs associated with meeting CPP compliance

[12] AWEC/100, Mullins/33, lines 11-21.

[13] AWEC/200, Mullins/4, line 13.

[14] *Id*. at 4, lines 14-16.

[15] *Id*. at 4, lines 14-16.

[16] NW Natural/2300, Walker-Wyman/9, lines 14-17.

targets falls outside of this scope.[17] For this reason, the Company did not include the costs of the Lexington RNG Project in its LRIC Study for the forward Test Year in this proceeding.

Q. Are there any other examples of costs that the Company does not allocate in its LRIC study due to regulatory precedent?

A. Yes, the Company does not calculate nor does it allocate to individual rate schedules the commodity cost of gas as well as several adjustment mechanisms (such as WARM and Decoupling) in its LRIC study. Commodity costs are calculated for all sales customers on a per therm basis through the annual Purchased Gas Adjustment ("PGA"). The PGA does not apportion commodity costs to the rate schedules based on overall distribution and capacity cost causation, as reflected in the LRIC study. Rather, the PGA assigns the same cost on a per therm basis to every sales schedule, and the cost that every customer pays is directly tied to that customer's consumption. In other words, the cost of gas procurement directly follows the cost causer on an equal basis (e.g., every sales customer pays the same amount for every therm consumed, notwithstanding that customer's contribution to the system's overall distribution and capacity costs).

[17] For a description of the Company's LRIC study filed in this proceeding, please refer to NW Natural/1400, Wyman. At NW Natural/1400, Wyman/18, for instance, the Company states: "The Test Year proposed cost allocation to each schedule is based on this incremental system cost and is further informed by the organization of the proposed Test Year revenue requirement into the following buckets of costs: commodity, meter reading and billing, meters and services, system core, transmission, and gas storage." Each bucket, excluding commodity, is directly related to the cost of meeting the Company's distribution and capacity needs. The commodity bucket is equal to the forecasted sales throughput multiplied by the commodity cost of gas as determined in the Company's annual PGA filing; it is included in the LRIC study as an operating revenue deduction so that the Company may calculate its incremental net operating revenue deficiency (or sufficiency).

Q. AWEC notes that the LRIC study in this proceeding has indicated that the overall rates for the large volume customers far exceed their cost of service when "viewed on a wholistic basis."[18] How do you respond?

A. The Company's LRIC study in this proceeding does indicate that the large volume customers are overpaying their cost of service based on the study's calculated parity ratios at present rates. Again, we note that the LRIC study does not include any costs associated with complying with CPP emissions targets. If we were to, against regulatory precedent, mix system distribution and capacity costs with costs associated with commodity consumption and then allocated these combined costs across all rate classes, the LRIC study would not show as high a subsidy flowing from the large volume customers to the rest of the customer base. This is because the CPP compliance costs would be allocated across the customer classes based on total throughput, causing more costs on a per customer basis to be allocated to the large volume customers relative to small volume customers. As filed in this proceeding, the parity ratios at present rates calculated in the LRIC study do not reflect the marginal costs of CPP compliance.

Q. Did the Company make considerations in this proceeding for the fact that the results of its LRIC study indicated that large volume customers are overpaying their cost of service?

A. Yes, it did. As explained in the Reply Testimony NW Natural/2300, Walker-Wyman, the Company made a rate spread proposal to equitably distribute the

[18] AWEC/200, Mullins/5.

incremental revenue requirement such that the rate classes as a whole are moved closer to parity based on their indicated cost causation as determined in the LRIC study by allocating the incremental revenue requirement on less than an equal percent of margin basis to all rate schedules in the rate classes 31 and 32.[19] The Company's proposal, as well as the compromises and adjustments arising from issues raised by the Stipulating Parties, was the basis for parties' settled rate spread for all revenue requirement items excluding the Lexington RNG Project, as presented in Appendix B to the First Stipulation.[20] The First Stipulation rate spread similarly allocates the incremental revenue requirement on less than an equal percent of margin basis to all rate schedules in the rate classes 31 and 32. This spread represents an incremental approach, in that it works to move all rate classes closer to parity, and does so in a manner that works to minimize rate shock.

Q. AWEC suggests that "CPP compliance costs will be driven by *changes* in throughput," not just overall throughput.[21] How do you respond?

A. It is unclear what AWEC is arguing here. We agree that changes in customer class (or just customer's) throughput would impact CPP compliance costs. That does not change the fact that we are the point of regulation for all of our customers and our compliance with the CPP is based on the overall emissions of all of our customers, regardless of customer class.

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[19] NW Natural/2300, Walker-Wyman/9, lines 8-14.

[20] *See* NW Natural-Staff-CUB-AWEC-SBUA/100, Kravitz, Fjeldheim, Gehrke, Mullins, and Kermode/34-38 (discussing the details of the Stipulating Parties' agreement regarding rate spread and rate design).

[21] AWEC/200, Mullins/6-7.

Q. AWEC believes that new costs do not require the Commission to modify a special contract.[22] Do you agree?

A. It depends on the provisions of each special contract. If and to the extent that a special contract would need to be modified to recover Lexington RNG Project costs, then a Commission order would be needed to approve such modification.

Q. Please summarize AWEC's concerns with deferring costs for special contracts in order to modify the contracts.

A. AWEC believes that "[u]sing a deferral to address cost allocation between rate classes has many procedural downfalls such as having to deal with earnings tests, which are applicable to only a subset of customers, and considering an appropriate interest rate, which are typically limited for specific customer deposits."[23]

Q. What is your response to AWEC's concerns?

A. First, the deferral does not address cost allocation, it simply holds back money to be amortized into rates at a later time. The allocation of the Lexington RNG Project will be settled within this docket. Second, the Company has many deferrals that are for only a subset of customers. If an earnings test shows the Company is over earning, a write down of the deferral is possible, which would keep the money allocated to only the set of customers impacted by the deferral. Last, deferrals

[22] *Id*. at 8, lines 18-20.

[23] *Id.* at 9, lines 17-20.

historically accrue interest at the Company's cost of capital with some minor exceptions for certain deferral accounts.[24]

Q. AWEC's witness Mr. Mullins asserts that NW Natural did not identify that it was seeking to amortize the cost of service for the Lexington RNG Project from the in-service date to the rate case effective date. Is that assertion correct?

A. No. In NW Natural/1300, Walker, page 28, NW Natural states: "[s]ee NW Natural/1314, Walker for the anticipated cost of service for the RNG investments to be included in Schedule 198". The first page of NW Natural/1314, Walker is clearly labeled as "UG 435 – Lexington RNG Deferral Costs from Feb. – Oct." Furthermore, Confidential NW Natural/2301, Walker-Wyman updated the cost of service deferral on the first page of the exhibit with the same heading "UG 435 – Lexington RNG Deferral Costs from Feb. – Oct." The total cost of service between the deferral and the Year 1 costs are equal to the amount presented in NW Natural/1403, Wyman.[25]

In CUB's Opening Testimony, it recognizes that the Company is deferring the cost of service between the in-service date and the rate effective date for the Lexington RNG Project.[26] CUB also agrees that the deferral is appropriate in this

[24] See *In re Public Utility Commission of Oregon*, Docket UM 1147, Order No. 08-263 at 1 (May 22, 2008) (noting that, "[h]istorically, a utility's deferred accounts have earned interest based on that utility's authorized rate of return (AROR)," before establishing a modified interest rate for deferred accounts during the amortization period).

[25] NW Natural/1403, Wyman/1.

[26] CUB/200, Gehrke/26-27.

instance and the Company should be able to amortize the deferral into rates starting November 1, 2022.[27]

Q. What are some of the reasons AWEC does not believe the costs incurred between the in-service date and the rate effective date should be recovered?

A. AWEC believes recovery of a forecast, not actuals, of the cost of service during this period is inappropriate.[28] Mr. Mullins believes there is no basis to consider the prudence of the actual cost incurred over the period in this proceeding.[29] Further, he explains that the 2022 earnings test would not be available until May 2023 to determine if amortization is appropriate.[30]

Q. Why is it appropriate to amortize a forecasted cost of service between the in-service date and the rate effective date of this proceeding?

A. The project costs, as with all components of the revenue requirement, are forecasted in a future Test Year, so including forecasts in rates is common practice. The Company is willing, similar to the TSA Security Directive 2 cost of service deferral in the First Stipulation of this docket, to include actual results for amortization. The Company is tracking the actual costs for the Lexington RNG Project since it went into service and could include the actual costs through September in the compliance filing of this docket for amortization starting on November 1, 2022.

[27] *Id*.

[28] AWEC/200, Mullins/10.

[29] *Id*. at 10-11.

[30] *Id*. at 11.

Q. What is the amortization period proposal for the deferred costs from the in-service date to the rate effective date in the case?

A. The Company is asking for a one-year amortization period using the rate spread allocation methodology as determined in this proceeding for the Lexington RNG Project cost of service. The total estimated cost is provided in Confidential NW Natural/2301, Walker-Wyman.[31] That cost is being spread to all customers and has minimal customer impacts.

Q. AWEC states it would not be possible to perform an earnings test.[32] Do you agree?

A. No, an earnings test is not necessary. The Company is seeking recovery under Schedule 198 and does not believe that such deferrals should be subject to an earnings test as explained in the Surrebuttal Testimony of Zachary Kravitz, NW Natural/2500, Kravitz.[33]

Q. What is AWEC's concern regarding income taxes associated with the Lexington RNG Project investment?

A. AWEC has indicated its concern is that the Lexington RNG Project accumulated deferred income taxes ("ADIT") might have been different in future years if the Lexington RNG Project acquisition was structured as direct utility ownership rather than through the actual equity investment structure.[34] ADIT are included in the

[31] NW Natural/2301, Walker-Wyman/1 (Confidential).

[32] AWEC/200, Mullins/11, lines 4-10.

[33] NW Natural/2500, Kravitz/14-15. *See also* ORS 757.259(5).

[34] AWEC/200, Mullins/14, lines 20-22.

determination of rate base, and as such, they influence the cost of the investment for customers.

Q. What is AWEC's request or proposal to address income taxes associated with the Lexington RNG Project investment?

A. AWEC notes that ADIT is not an issue in the current proceeding but might be in the future.[35] AWEC is requesting confirmation or acknowledgement from the Commission that if the actual ADIT balance at any time during the next five years is different than it would have been under a direct utility ownership structure of the Lexington RNG Project, AWEC can raise this as an issue.[36] This request by AWEC is due to the Commission-approved stipulation in UI 451, whereby the parties agreed "not to oppose or seek any changes to the Lexington RNG Project's ratemaking treatment for a period of five years following the commercial operation date of the project."[37]

Q. Are income taxes a consideration by NW Natural when evaluating the acquisition of RNG?

A. Yes. As noted by Anna Chittum in her Surrebuttal Testimony, NW Natural/2900, Chittum, "NW Natural's strategy is to acquire the least cost/least risk RNG[.]"[38] Furthermore, to support this goal, Ms. Chittum explains that "the Company has

[35] *Id*. at 15.

[36] *Id.*

[37] *In Re Northwest Natural Gas Company, dba NW Natural, Request for Approval of an Affiliated Interest Agreement with Lexington Renewables, LLC,* Docket UI 451, Order No. 22-211, App. A at 5 (June 6, 2022).

[38] NW Natural/2900, Chittum/2, lines 9-10.

developed a methodology by which it can evaluate proposed investments in RNG infrastructure and purchases of RNG on an apples-to-apples basis."[39] This least cost/least risk analysis, which compares all opportunities on an apples-to-apples basis, includes consideration of income taxes.

Q. Does the Company support AWEC's proposal?

A. No. NW Natural shares AWEC's objective to ensure that customers continue to receive safe, reliable, and affordable energy. However, the Company does not believe it is appropriate to evaluate deferred taxes, or income taxes in general, separately from the overall investment. As noted above, the Company evaluates each RNG acquisition opportunity for least cost/least risk as a complete package. Income taxes do not exist in a vacuum but are a direct reflection and result of the revenues, expenses and rate base associated with the overall investment or RNG acquisition opportunity.

The parties have already agreed that NW Natural will notify interested parties "[i]f partnership allocations of income tax losses from Lexington Renewable LLC to NW Natural RNG Holding Company LLC are limited/reduced on an annual basis compared to traditional utility ownership."[40] In addition, if allocations of income tax losses are different NW Natural would "present a plan to address the matter."[41]

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[39] *Id*. at 2, lines 10-12.

[40] *In Re Northwest Natural Gas Company, dba NW Natural, Request for Approval of an Affiliated Interest Agreement with Lexington Renewables, LLC,* Docket UI 451, Order No. 22-211, App. A at 5 (June 6, 2022).

[41] *Id.*

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.