# Oregon Public Utility Commission

# e-FILING REPORT COVER SHEET

COMPANY NAME: PacifiCorp d/b/a Pacific Power
DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes If yes, submit a redacted public version (or a cover letter) by email. Submit the confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.
Select report type: RE (Electric) RG (Gas) RW (Water) RT (Telecommunications) RO (Other, for example, industry safety information)
Did you previously file a similar report? No See, report docket number: RE 181
Report is required by:  Statute  Order  Note: A one-time submission required by an order is a compliance filing and not a report (file compliance in the applicable docket)  Other  (For example, federal regulations, or requested by Staff)
Is this report associated with a specific docket/case? No Yes, docket number: UM 1893
List Key Words for this report. We use these to improve search results.
OAR 860-030-0011, 2022 Energy Efficiency Avoided Cost Report
Send the completed Cover Sheet and the Report in an email addressed to <a href="PUC.FilingCenter@state.or.us">PUC.FilingCenter@state.or.us</a>
Send confidential information, voluminous reports, or energy utility Results of Operations Reports to PUC Filing Center, PO Box 1088, Salem, OR 97308-1088 or by delivery service to 201 High Street SE Suite 100, Salem, OR 97301.



September 15, 2022

# VIA ELECTRONIC FILING

Public Utility Commission of Oregon Attn: Filing Center 201 High Street SE, Suite 100 Salem, OR 97301-3398

Re: RE 181—PacifiCorp's 2022 Energy Efficiency Avoid Cost Report

In accordance with Oregon Administrative Rule 860-030-011(1), PacifiCorp d/b/a Pacific Power encloses for filing its 2022 Energy Efficiency Avoided Cost Report.

If you have questions about this filing, please contact Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934.

Sincerely,

Shelley McCoy Director, Regulation

Shilling McCory

Enclosure

# **Energy Efficiency Avoided Cost Submission Template - Electric**

**Utility Name: PacifiCorp** 

Submission Date: 9/15/2022

#### **Instructions and Definitions**

- <> Please fill out this workbook completely and per the instructions and submit via electronic filing to docket UM 1893. Submissions are due October 15 of each year.
- <> Inputs will be reviewed and approved by the OPUC before being sent to the Energy Trust of Oregon for use in Avoided Cost development
- <> Provide as much detail as possible when sourcing data inputs, including the link to the source (if available), page number and table or graph number

This will increase the efficiency of this process and require less iteration during the OPUC review period

Required pages 1,2,3,4 refer to data presented in the most recently acknowledged IRP, IRP Update, or General Rate Case unless otherwise noted.

#### 1) Global Inputs - IRP

- <> Most components of the avoided costs are input into this tab including inflation/discount rates, line losses, risk reduction values, T&D deferral values, and generation deferral values
- <> Identify the winter & summer peak periods for Transmission and Distribtution. The Generation LOLP Map will be utilized for generation peak definitions.
- <> If necessary, Energy Trust will work with each utility about sector definitions for T&D for which values to provide for Res, Com, and Ind
- <> Ensure that the dollar years of the data inputs match the source Energy Trust will inflate to the proper year
- <> Please provide the values in the most recently acknowledged IRP

#### 2) Forward Market Prices - IRP

- <> Provide forward market price forecast by month for both high load hours and low load hours
- <> Please provide the dollar amount of these prices that is associated with carbon costs (or %). If it is a dollar value, this is a subset of the total prices provided The total forward market prices should be the FULL price, including carbon
- <> Indicate if the forecast is in nominal or real dollars (and what dollar year if real)
- <> Please provide the values in the most recently acknowledged IRP

#### 3) LOLP - IRP

- <> input a 12x24 Loss of Load Probability neat map per the example in the worksneet
- <> These will be potentially utilized in future iterations of avoided cost updates pending outcome of UM1893
- <> Include heat maps for all days, weekdays only, and weekends only
- Please provide the values in the most recently acknowledged IRP

#### 4) RPS Compliance - IRP

- <> Input RPS compliance costs by year
- <> Please provide the values in the most recently acknowledged IRP

#### 1a, 2a, 3a, 4a) Alternative Submissions

- <> Use these worksheets to provide alternative values to the most recently acknowledged IRP values
- <> Provide a rationale for submitting the alternative values in the box provided at the top of each alternative worksheet
- <> If a second set of alternative values is submitted, simply copy the alt tabs necessary and rename to 1b, alt 2 in the tab name

						SOURCING		
Global Assu	•		Dolla- V-				years listed here are the same as the source.	Source Notes
Avoided Cost Element	Units	Value	Dollar Year	Source	Source Page #	Table # (if applicable)	Source Link or File Name https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener ey/integrated-resource-plan/2021-	Source Notes
_							irp/Volume%20I%20-	
lation Rate	Percent	2.155%	N/A	PacifiCorp 2021 IRP	Vol. 1: pg. 226		%209.15.2021%20Final.pdf https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener	Sep. 2020 forecast
eal Discount Rate	Percent	4.63%	N/A	PacifiCorp 2021 IRP	Vol. 1: pg. 226		gy/integrated-resource-plan/2021- irp/Volume%201%20- %209.15.2021%20Final.pdf	Calculated from inflation and nominal discount rates
egional Act Credit	Percent	10.00%	N/A					I
gioriai Act Credit	Percent	10.00%	N/A					
ansmission Loss Factor	Percent	3.50%	N/A	PacifiCorp's most recent class-level line losses are from its 2018 Loss Study published in 2020.				
istribution Loss Factor, Commercial	Percent	3.69%	N/A	2018 Loss Study, incremental to transmission losses. Reflects proportion of the class interconnected at each voltage level.				
distribution Loss Factor, Industrial	Percent	3.20%	N/A	2018 Loss Study, incremental to transmission losses. Reflects proportion of the class interconnected at each voltage level.				
Distribution Loss Factor, Residential	Percent	4.46%	N/A	2018 Loss Study, incremental to transmission losses. Reflects proportion of the class interconnected at each voltage level.				
								Nominal-levelized value from 2021 IRP is converted to real-levelized input. Risk reduction value for EE
							https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener gy/integrated-resource-plan/2021-	to real-levelized input. Nisk reduction value for Ee selections calculated using IRP models. The difference in present-value revenue requirement (PVRRd) between stochastic studies and deterministic studies with and without energy efficiency, divided by the net present value of the
isk Reduction Value	\$/MWh	\$3.05	2021	PacifiCorp 2021 IRP	Vol. 1: pg. 211		irp/Volume%20I%20- %209.15.2021%20Final.pdf	energy efficiency savings (MWh) yields the \$/MWh assumed value of stochastic risk reduction.
	T						https://www.pacificorp.com/content/da	
ransmission Deferral Credit	\$/kW-yr	\$6.34	2020	PacifiCorp 2021 IRP	Vol. 1: pg. 211	Table 7.10	m/pcorp/documents/en/pacificorp/ener gy/integrated-resource-plan/2021- irp/Volume%201%20- %209.15.2021%20Final.pdf	
easonal Capacity Split - Summer	Percent	38.75%	N/A	PacifiCorp 2021 IRP	Support for Appendix N - Ene	rgy Storage Potential Evalu	a 2021 IRP T&D 12x24 CONF_2021 08 29.xl	sx
easonal Capacity Split - Winter	Percent	61.25%	N/A	PacifiCorp 2021 IRP	Support for Appendix N - Ene	rgy Storage Potential Evalu	a 2021 IRP T&D 12x24 CONF_2021 08 29.xl	SX
immer Peak Period Definition linter Peak Period Definition		Trans. 12x24 profile Trans. 12x24 profile		PacifiCorp 2021 IRP PacifiCorp 2021 IRP				Day is intended to be weekday or weekena Day is intended to be weekday or weekena
eficiency start year	Year	2021	N/A	2021 IRP Assumption: T&D EE credit applied from first year of study				
							https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener gy/integrated-resource-plan/2021- irp/Volume%201%20-	
Distribution Deferral Credit	\$/kW-yr	\$13.38		PacifiCorp 2021 IRP		Table 7.10	%209.15.2021%20Final.pdf	
easonal Capacity Split - Summer easonal Capacity Split - Winter	Percent Percent	89.55% 10.45%	N/A N/A	PacifiCorp 2021 IRP PacifiCorp 2021 IRP	Support for Appendix N - Ene Support for Appendix N - Fne	rgy Storage Potential Evalu	a 2021 IRP T&D 12x24 CONF_2021 08 29.xl a 2021 IRP T&D 12x24 CONF_2021 08 29.xl	sx sx
ummer Peak Period Definition		Dist. 12x24 profile		PacifiCorp 2021 IRP				Day is intended to be weekday or weekens
finter Peak Period Definition		Dist. 12x24 profile		PacifiCorp 2021 IRP	Support for Appendix N - Ene	rgy Storage Potential Evalu	a 2021 IRP T&D 12x24 CONF 2021 08 29.xl	Day is intended to be weekday or weekens
			14/75					
eficiency start year				2021 IRP Assumption: T&D EE credit applied from first year of study			_	
eficiency start year	Year	2021		2021 IRP Assumption: T&D EE credit applied from first year of study				
Deficiency start year				Simple Cycle Combustion Turbine, Frame F, 1500'. 2021 IRP Supply			https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener ay/integrated-resource-plan/2021- irg/Volume%209/C0-	For the referenced value and calculation, see
			N/A	Simple Cycle Combustion Turbine, Frame F, 1500'. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VOM, consistent with standard QF pricing approved 7/1/22.	Vol. 1: pg. 179		https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener cy/interarted-resource-plan/2021- zp/volume%20%20- %209.15.2021%20Final.pdf https://www.pacificory.com/content/da m/pcorp/documents/en/pacificory	For the referenced value and calculation, see Source 2: QF Filing, Table 9, pg. 36 (link at right)
Seneration Capacity Credit	Year	2021	N/A	Simple Cycle Combustion Turbine, Frame F, 1500'. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VOM, consistent with standard QF pricing approved 7/1/22.  2021 IRP LOLP Data, June - September events. Results are discussed in 2021 IRP Volume II, Appendix K.			https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener cy/integrated-resource-plan/2021- rs/Volume%209k20- \$200-15.2021 %200 frait pdf https://www.pacificorp.com/content/da m/pcorp/documents/en/pacificorp/ener	
Seneration Capacity Credit	Year S/kW-yr	\$85.71	N/A 2020	Simple Cycle Combustion Turbine, Frame F, 1500°. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VDM, consistent with standard QF pricing approved 7/1/22.  2021 IRP LOLP Data, June - September events. Results are discussed in			https://www.pacificorn.com/content/da m/pocord/documents/en/pacificord/ener gr/integrated-enource-plan/2012- ics/Volume/82009-20. \$200-18.2012/SUDFnat.pdf https://www.pacificorn.com/content/da m/pocord/documents/en/pacificord/ener gr/integrated-resource-plan/2021- ics/Volume/82009-2021-2021-2021-2021-2021-2021-2021-	
Deficiency start year  Seneration Capacity Credit  Seasonal Capacity Split - Summer seasonal Capacity Split - Winter	Year \$/kW-yr	2021 \$85.71	N/A 2020	Simple Cycle Combustion Turbine, Frame F, 1500°. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VOM, consistent with standard QF pricing approved 7/1/22.  2021 IRP LOLP Data, June - September events. Results are discussed in 2021 IRP Volume II, Appendix K. 2021 IRP LOLP Data, October - May events			https://www.pacificorp.com/content/da m/scorp/documents/en/pacificorp/ener ar/intersrated-resource-plan/2021- iro/Volume%209/20- 18/2001-5.2021/49/20Final.pdf https://www.pacificorp.com/content/da m/scorp/documents/en/pacificory/ener ar/intersrated-resource-plan/2021- ar/intersrated-resource-plan/2021- s209-15-2021/49/20Final.pdf https://www.pacificopower/restrict/contens/a ar/intersrated-resource-plan/2021- sessulation/oregon/tariffs/pursa/standar- stassi- cossulation/oregon/tariffs/pursa/standar- d-Avoided Cost Rates-Avoided Cost P	
eneration Capacity Credit easonal Capacity Split - Summer easonal Capacity Split - Winter	Year \$/kW-yr	585.71 585.71 82.8% 17.2%	2020 N/A N/A	Simple Cycle Combustion Turbine, Frame F, 1500°. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VOM, consistent with standard QF pricing approved 7/1/22.  2021 IRP LOLP Data, June - September events. Results are discussed in 2021 IRP Volume II, Appendix K.  2021 IRP LOLP Data, October - May events  From Standard QF AC effective 2022 07 01 (update following 2021 IRP			https://www.pacificorp.com/content/da n/pccon/documents/en/pacificorp.lener ar/interprated-resource-plan/2021- ics/Volume/s209520- 2300-1.5.20013-20013-2001-interpretained-interpretained-resource-plan/2021- interpretained-resource-plan/2021- resource-plan/2021-interpretained-interpretained-resource-plan/2021-interpretained-resource-plan/2021-interpretained-interpr	
Seneration Capacity Credit	S/kW-yr Percent Percent	2021 \$85.71	2020 N/A N/A	Simple Cycle Combustion Turbine, Frame F, 1500°. 2021 IRP Supply Side Table, Table 7.2 on page 179. Includes VOM, consistent with standard QF pricing approved 7/1/22.  2021 IRP LOLP Data, June - September events. Results are discussed in 2021 IRP Volume II, Appendix K. 2021 IRP LOLP Data, October - May events			https://www.pacificorp.com/content/da m/scorp/documents/en/pacificorp/ener ar/intersrated-resource-plan/2021- iro/Volume%209/20- 18/2001-5.2021/49/20Final.pdf https://www.pacificorp.com/content/da m/scorp/documents/en/pacificory/ener ar/intersrated-resource-plan/2021- ar/intersrated-resource-plan/2021- s209-15-2021/49/20Final.pdf https://www.pacificopower/restrict/contens/a ar/intersrated-resource-plan/2021- sessulation/oregon/tariffs/pursa/standar- stassi- cossulation/oregon/tariffs/pursa/standar- d-Avoided Cost Rates-Avoided Cost P	

#### **Forward Price Inputs**

Real or Nominal?	Nominal		
Dollar Year:	n/a		
Carbon Prices Additive?	Embedded in Market F	Prices	NOTES:
Carbon Value Units (\$/MWh	\$/Ton		Please provide notes as to how this value rela
	March 2021 Medium (	Gas/Medium CO2 electricity market prices	forward market prices. It can be expressed as
Source and Pg #:	used in 2021 IRP. 2021	IRP Vol I, p. 226-228.	percentage of forward market prices, a set \$/
	2021 IRP public data d	isk: \Assumptions + Inputs\Price Curve\	\$/ton. Please identify the units in the box to
Source Link or File Name:	MedGas_2025MCO2.1	0.09.18.xlsx	
Source Notes:	Data for 2041+ escalat	ed at inflation	
	PacifiCorp's 2021 IRP of	loes not include a carbon emissions rate or o	cost on top of the market price for electricity.

#### NOTES:

Please provide notes as to how this value relates to forward market prices. It can be expressed as a percentage of forward market prices, a set \$/MWh, or \$/ton. Please identify the units in the box to the left

				HLH Carbon Cost	LLH Carbon Cost
				(OR % of HLH Price that	(OR % of LLH Price that
Year	Date	HLH Total (\$/MWh)	LLH Total (\$/MWh)	accounts for Carbon?)	accounts for Carbon?)
2	021 1/1/2021	23.62	20.91	-	-
2	021 2/1/2021	51.71	36.10	-	-
2	021 3/1/2021	. 27.62	25.66	-	-
2	021 4/1/2021	. 22.48	16.84	-	-
2	021 5/1/2021	. 19.79	12.27	-	-
2	021 6/1/2021	. 25.28	17.26	-	-
2	021 7/1/2021	35.41	23.41	-	-
2	021 8/1/2021	. 39.52	26.26	-	-
2	021 9/1/2021	30.33	25.44	-	-
2	021 10/1/2021	. 37.04	28.70	-	-
2	021 11/1/2021	36.54	28.34	-	-
2	021 12/1/2021	. 39.18	30.43	-	-
2	022 1/1/2022	39.61	29.53	-	-
2	022 2/1/2022	38.67	30.71	-	-
2	022 3/1/2022	28.72	23.97	-	-
2	022 4/1/2022	19.52	16.66	-	-
2	022 5/1/2022	15.13	10.39	-	-
2	022 6/1/2022	23.93	16.41	-	-
2	022 7/1/2022	40.49	23.16	-	-
2	022 8/1/2022	43.12	23.88	-	-
2	022 9/1/2022	28.02	23.75	-	-
2	022 10/1/2022	32.17	25.30	-	-
2	022 11/1/2022	33.08	26.87	-	-
2	022 12/1/2022	38.22	29.52	-	-
2	023 1/1/2023	37.40	28.84	-	-
2	023 2/1/2023	36.00	28.25	-	-
2	023 3/1/2023	27.50	22.28	-	-
2	023 4/1/2023	19.53	16.83	-	-
2	023 5/1/2023	14.11	11.77	-	-
2	023 6/1/2023	22.59	15.10	-	-
2	023 7/1/2023	47.27	22.75	-	-
2	023 8/1/2023	52.77	25.96	-	-
2	023 9/1/2023	29.44	22.99	-	-
2	023 10/1/2023	34.09	24.97	-	-
2	023 11/1/2023	34.85	27.80	-	-
2	023 12/1/2023	39.00	29.81	-	-
2	024 1/1/2024	38.66	28.62	-	-
2	024 2/1/2024	40.24	30.67	-	-
2	024 3/1/2024	26.68	23.68	-	-
2	024 4/1/2024	16.78	15.99	-	-
2	024 5/1/2024	15.89	12.49	-	-
2	024 6/1/2024	19.24	15.61	-	-
2	024 7/1/2024	52.93	24.71	-	-

67.46

34.57

40.10

36.63

45.56

46.09

30.67

26.96

31.04

29.76

34.07

36.05

9.93

9.93

2024

2024

2024

2024

2024

2025

8/1/2024

9/1/2024

10/1/2024

11/1/2024

12/1/2024

1/1/2025

#### Loss of Load Probability Heat Map Input

NOTE: This is utilitized for generation deferrals only.

Source and page #: 2021 IRP: Support for Appendix K - Capacity Contribution urce Link or File Name: 2030 ENS results index 13668 CONF-xksb

Source Notes: The LOLP data from the 2021 IRP was prepared at the end of the IRP process, based on a portfolio comparable to the 2021 IRP preferred portfolio.

WEEKDAYS &	WEEKENDS												WEEKI	DAYS ONLY												WEE	KENDS ONLY											
Count	31	28	31	30	31	30	3:	1 31	1 30	31	. 30	31	Count		1 2	3	1 30	31	30	31	31	. 30	31	1 30	31	Cour	nt	31 2	3 31	1 30	) 3	1 30	31	31	30	31	30	31
Hr Ending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul J	lug S	Sep (	Oct M	Nov De	ec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00		1 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00		1 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00		2 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00		2 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00		3 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00		3 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00		4 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00		4 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		5 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		5 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00		6 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00		6 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00		7 0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00		7 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01		8 0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01		8 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		9 0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		9 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10 0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		11 0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		11 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		14 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		14 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00		15 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00		15 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00		16 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00		16 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		17 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		17 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.00	0.00	0.00		18 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.00	0.00	0.00		18 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.00	0.00	0.00		19 0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.00	0.00	0.00		19 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
20	0.00	0.01	0.00	0.00	0.00	0.02	0.05	0.04	0.03	0.00	0.00	0.00		20 0.00	0.01	0.00	0.00	0.00	0.01	0.04	0.04	0.02	0.00	0.00	0.00		20 0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00
21	0.00	0.01	0.00	0.00	0.00	0.02	0.04	0.03	0.03	0.00	0.00	0.00		21 0.00	0.01	0.00	0.00	0.00	0.01	0.04	0.03	0.02	0.00	0.00	0.00		21 0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.02	0.00	0.00	0.00		22 0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.01	0.00	0.00	0.00		22 0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00		23 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00		23 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00		24 0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00		24 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# **RPS Compliance Inputs IRP**

Real or Nominal?	Nominal	
Dollar Year:		
Source and Pg #:	PacifiCorp 2021 IRP, Vol I, p.301	
Source Link or File Name:	https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/eted-resource-plan/2021-irp/Volume%20I%20-%209.15.2021%20Final.pdf	nergy/integra
Source Notes:	Oregon RPS compliance is achieved through 2040 with the addition of new rer resources and transmission in the 2021 IRP preferred portfolio. The IRP Prefer does not include any renewable resources added for the purpose of RPS comp cost-effective renewables in the portfolio are lower cost than non-RPS alternates.	red Portfolio lliance. The

RPS Compliance Cost (\$/MWh)		Avoided RPS Compliance Obligation (%)
2021	0	20%
2022	0	20%
2023	0	20%
2024	0	20%
2025	0	27%
2026	0	27%
2027	0	27%
2028	0	27%
2029	0	27%
2030	0	35%
2031	0	35%
2032	0	35%
2033	0	35%
2034	0	35%
2035	0	45%
2036	0	45%
2037	0	45%
2038	0	45%
2039		45%
2040		50%
2041		50%
2042		50%
2043		50%
2044		50%
2045		50%
2046		50%
2047		50%
2048		50%
2049		50%
2050		50%

Alter	native Submission	ıs	Rationale for alternative submission: no alternative global input assumptions proposed										
Global	Assumptions Inp	utc		SOURCING									
	Assumptions imp			Provide as much detail as possible with sourcing including a link. Ensure that dollar years listed here are the same as the source.									
Avoided Cost Element	Units	Value Dollar \	ear Source	Source Page #	Table # (if applicable)	Source Link or File Name	Source Notes						
Inflation Rate	Percent	N/A											
Real Discount Rate	Percent	N/A											
Regional Act Credit	Percent	N/A											
Transmission Loss Factor	Percent	N/A											
Distribution Loss Factor, Commercial	Percent	N/A											
Distribution Loss Factor, Commercial	Percent	N/A											
Distribution Loss Factor, Residential	Percent	N/A											
The state of the s	. sreene	JA/A											
Risk Reduction Value	\$/MWh												
		<u>'</u>		<u> </u>									
Transmission Deferral Credit	\$/kW-yr												
Seasonal Capacity Split - Summer	Percent	N/A											
Seasonal Capacity Split - Winter	Percent	N/A											
Summer Peak Period Definition	Month/Day/Hour	N/A											
Winter Peak Period Definition	Month/Day/Hour	N/A											
Deficiency start year	Year	N/A											
Distribution Deferral Credit	\$/kW-yr												
Seasonal Capacity Split - Summer	Percent	N/A											
Seasonal Capacity Split - Winter	Percent	N/A											
Summer Peak Period Definition	Month/Day/Hour	N/A											
Winter Peak Period Definition	Month/Day/Hour	N/A											
Deficiency start year	Year	N/A											
Generation Capacity Credit	\$/kW-yr		18										
Seasonal Capacity Split - Summer	Percent	N/A											
Seasonal Capacity Split - Winter	Percent	N/A											
Deficiency start year	Year	N/A											
RPS Compliance Cost	\$/MWh												
Avoided RPS Compliance Obligation	%	N/A											

Alternative	Rationale for alternative submission:
	The prices in PacifiCorp's acknowledged 2021 IRP are from March 2021 and are now roughly 18 months out of date. The alternative prices reflect the
Submissions	medium gas, zero CO2 pricing from PacifiCorp's approved Standard QF Pricing, which reflect March 2022 inputs.

#### **Forward Price Inputs**

Nominal	
n/a	
Additive	
\$/Ton	
March 2022 Medium G	as/Zero CO2 electricity market prices used in
Data for 2041+ escalat	ed at inflation
	n/a Additive \$/Ton

NOTES:

Please provide notes as to how this value relates to forward market prices. It can be expressed as a percentage of forward market prices, a set \$/MWh, or \$/ton. Please identify the units in the box to the left

Prices do not include a carbon emissions rate in the market price for electricity

electricity.	
ILH Carbon Cost (\$/MWh)	LLH Carbon Cost (\$/MWh)
OR % of HLH Price that	(OR % of LLH Price that

					(OR % of HLH Price that	(OR % of LLH Price that
Year	Date		HLH Total (\$/MWh)	LLH Total (\$/MWh)	accounts for Carbon?)	accounts for Carbon?)
	2021	1/1/2021		-	,	,
	2021	2/1/2021		-		
	2021	3/1/2023		-		
	2021	4/1/2023		-		
	2021	5/1/2021	-	-		
	2021	6/1/2021	-	-		
	2021	7/1/2023	-	-		
	2021	8/1/2023	-	-		
	2021	9/1/2021	-	-		
	2021	10/1/2021		-		
	2021	11/1/2021		=		
	2021	12/1/2023		-		
	2022	1/1/2022		36.43		
	2022	2/1/2022		34.67		
	2022	3/1/2022		32.35		
	2022	4/1/2022		39.30		
	2022	5/1/2022		29.39		
	2022	6/1/2022		30.86		
	2022	7/1/2022		49.32		
	2022	8/1/2022		71.35		
	2022	9/1/2022		70.81		
	2022	10/1/2022		58.03		
	2022	11/1/2022		57.12		
	2022	12/1/2022		73.31		
	2023 2023	1/1/2023		70.57 63.73		
	2023	2/1/2023 3/1/2023		42.34		
	2023	4/1/2023		26.48		
	2023	5/1/2023		20.48		
	2023	6/1/2023		25.68		
	2023	7/1/2023		55.56		
	2023	8/1/2023		63.79		
	2023	9/1/2023		54.68		
	2023	10/1/2023		46.91		
	2023	11/1/2023		50.87		
	2023	12/1/2023		59.57		
	2024	1/1/2024		59.84		
	2024	2/1/2024		54.23		
	2024	3/1/2024	48.65	46.70		
	2024	4/1/2024	33.26	25.92		
	2024	5/1/2024	32.90	20.77		
	2024	6/1/2024	32.29	19.31		
	2024	7/1/2024	105.86	65.81		
	2024	8/1/2024	127.35	78.18		
	2024	9/1/2024		64.62		
	2024	10/1/2024		43.07		
	2024	11/1/2024		47.16		
	2024	12/1/2024	1 68.97	56.13		

Alternative Submissions	Rationale for alternative submission: n/a

#### Loss of Load Probability Heat Map Input

NOTE: This is utilitized for generation deferrals only.
Source and page #:
urce Link or File Name:
Source Notes:

WEEKDA	YS & V	VEEKE	NDS

WEEKDAYS &	WEEKENDS											
Count	31	28	31	30	31	30	31	31	30	31	30	3
Hr Ending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.													
	WEEKDAYS	ONLY											
1 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Count	31	28	31	30	31	30	31	31	30	31	30	
2 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.													
3 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	1												0.0
4 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
\$ 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
6 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.													0.0
7 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	5												0.0
8 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	6												0.0
9 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	7												0.0
10   0.00   0.	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
11 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
13	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
14         0.00         0													0.0
15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	13												0.0
15	14												0.0
17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
18 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
19 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0													0.0
21         0.00         0	19												0.0
22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	20												0.0
23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.													0.0
	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0

WEEKENDS												
Count	31						31					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Alternative	Rationale for alternative submission: n/a
Submissions	

# **RPS Compliance Inputs IRP**

Real or Nominal?	Nominal	
Dollar Year:		
Source and Pg #:		
Source Link or File Name:		
Source Notes:		

RPS Compliance Cost (\$/MWh)	Avoided RPS Compliance Obligation (%)
2021 \$ -	20%
2022 \$ -	20%
2023 \$ -	20%
2024 \$ -	20%
2025 \$ -	27%
2026 \$ -	27%
2027 \$ -	27%
2028 \$ -	27%
2029 \$ -	27%
2030 \$ -	35%
2031 \$ -	35%
2032 \$ -	35%
2033 \$ -	35%
2034 \$ -	35%
2035 \$ -	45%
2036 \$ -	45%
2037 \$ -	45%
2038 \$ -	45%
2039 \$ -	45%
2040 \$ -	50%
2041	50%
2042	50%
2043	50%
2044	50%
2045	50%
2046	50%
2047	50%
2048	50%
2049	50%
2050	50%

		2021 IRP Med CO2	2021 IRP EE Calculated by IRP	Risk Reduction Credit Levelized values by
\$/ST		PAC Nom	models	year
	21	IRP: Figure 8.4		
2	2018			
2	2019			
2	2020			
2	2021		\$3.59	\$3.05
2	2022		\$3.59	\$3.11
2	2023		\$3.59	\$3.18
2	2024		\$3.59	\$3.25
2	2025	9.93	\$3.59	\$3.32
2	2026	11.15	\$3.59	\$3.39
2	2027	12.54	\$3.59	\$3.46
2	2028	14.09	\$3.59	\$3.54
2	2029	15.85	\$3.59	\$3.61
2	2030	17.83	\$3.59	\$3.69
2	2031	20.06	\$3.59	\$3.77
2	2032	22.58	\$3.59	\$3.85
2	2033	25.41	\$3.59	\$3.94
2	2034	28.59	\$3.59	\$4.02
2	2035	32.14	\$3.59	\$4.11
2	2036	36.13	\$3.59	\$4.20
2	2037	40.66	\$3.59	\$4.29

Nominal levelized 2021-2040 \$3.59 \$3.59 Real-levelized Adjustment 118%

2038

2039

2040

45.76

51.49

57.94

set so that nominal and real streams are equal

\$3.59

\$3.59

\$3.59

\$4.38

\$4.47

\$4.57

### 20XX IRP Med CO2 20XX IRP EE Risk Reduction Credit

Calculated Levelized by IRP values by models year

PAC Nom models

2XIRP: Figure X

	\$0.00	\$0.00
	\$0.00	\$0.00
	\$0.00	\$0.00
	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00
0.00	\$0.00	\$0.00

Nominal levelized 2021-2040 \$0.00 \$0.00 Real-levelized Adjustment 100%

set so that nominal and real streams are equal

	ion 12x24 Weighting		Dist. 12 Hour																							
Season	Monthly Weight	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Winter	4%	1	0%	0%	0%	0%	0%	0%	0%	2%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	6%	2	0%	0%	0%	0%	0%	0%	0%	3%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	0%	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	71%	7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	10%	23%	25%	11%	0%	0%	0%	0%	0%	0%
Summer	11%	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	4%	0%	0%	0%	0%	0%	0%	0%
Summer	7%	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	4%	1%	0%	0%	0%	0%	0%	0%
Summer	0%	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	0%	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	0%	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Transmis	ssion 12x24 Weighting		Trans. Hour	12x24	profile																					
Season	Monthly Weighting	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Winter	26%	1	0%	0%	0%	0%	0%	0%	0%	10%	10%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	33%	2	0%	0%	0%	0%	0%	0%	0%	18%	12%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	1%	3	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Summer	31%	7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	10%	11%	5%	0%	0%	0%	0%	0%	0%
Summer	5%	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%
Summer	3%	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%
Summer	0%	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	0%	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Winter	1%	12	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source and page #: 2021 IRP: Support for Appendix N - Energy Storage Potential Evaluation to Link or File Name: 2021 IRP T&D 12x24 CONF\_2021 08 29.xlsx

										R	Rationale for alternative submission: n/a															
													Alter	nativ	e Sub	missio	ons									
Distribut	ion 12x24 Weighting		Dist. 12 Hour	x24 pro	ofile																					
Season	Monthly Weight	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Winter	0%		1																							
Winter	0%		2																							
Winter	0%		3																							
Summer	0%		4																							
Summer	0%		5																							
Summer	0%		6																							
Summer	0%		7																							
Summer	0%		8																							
Summer	0%		9																							
Summer	0%	1																								
Winter	0%	1																								
Winter	0%	1:	2																							
Transmis	ssion 12x24 Weighting	)	Trans.	12x24 p	profile																					
_			Hour	_			_		_																	
Season	Monthly Weighting	Month	_ 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Winter	0%		1																							
Winter Winter	0%		2 3																							
Summer	0%		3 4																							
Summer	0% 0%		<del>4</del> 5																							
Summer	0%		6																							
Summer	0%		7																							
Summer	0%		8																							
Summer	0%		9																							
Summer	0%	1																								
Winter	0%	1																								
Winter	0%	1:																								
AAHITEI	0%		_																							