

October 18, 2023

VIA ELECTRONIC FILING

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

RE: LC 82 – PacifiCorp Errata Filing for Clean Energy Plan

PacifiCorp d/b/a Pacific Power (PacifiCorp or the Company) hereby submits the attached Errata to the May 31, 2023, 2023 Clean Energy Plan. The Company determined that there was an error in the average annual cost for Pathways 1 and 2 reflected on pages 68-70 of the report and pages 52, 58-59,62-63, 65-66, 68-69, and 71-72 in the CEP Data Templates. For convenience, both a red-line and clean version of the corrected pages of the report and the updated CEP Data Template pages are enclosed. The Excel version of the updated CEP Data Templates and any impacted workpapers will also be uploaded on PacifiCorp's CEP webpage and sent to OPUC.

Informal inquiries may be directed to Stephanie Meeks, Regulatory Manager, at (503) 813-5867.

Sincerely,

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Matthew McVee Vice President, Regulatory Policy and Operations

Enclosure

2023 Clean Energy Plan

Pages 68-70

compliance, two additional pathways are shown (Pathway 1 and Pathway 2). These two pathways to emissions compliance are described in detail in the next chapter, Chapter VII. Any additional actions taken to make the CEP portfolio emissions-compliant will result in more incurred costs. These cost projections are estimates of the additional cost of compliance to Oregon customers and are in no way final, but present the Company's expectations of the reasonable range of possible costs.

As can be seen in the row labeled "CEP Portfolio" under the Pathway 1 section of the table, the costs of the additional small-scale begin to show up significantly in 2030 when the additional capacity is first built, with an average cost of cost of \$21281 million per year in each year through 2039. In the last period from 2040 to 2042 (and beyond), the average annual cost increases to \$39452 million per year on a nominal basis. Over the last 13 years of the planning horizon, 2030 - 2042, the CEP portfolio incurs approximately \$671 million more in total nominal costs than in the preferred portfolio before considering emissions compliance; the net present value of these incremental costs appears diminished to \$268 million due to the time value of money. Under pathway 1 to compliance, the total increased nominal cost from 2030 to 2042 is \$3.301.87 billion. Under pathway 2 to compliance, the total-increased nominal cost from 2030 to 2042 is \$2.041.82 billion.

	Years 2023-2029	Years 2030-2039	Years 2040-2042
2023 IRP Preferred Portfolio	-	-	-
Base Cost Allocation Compared to	Preferred Portfolio		
CEP Portfolio	\$3	\$36	\$103
CBRE	\$15	\$51	\$109
SSR 15%	\$3	\$54	\$154
SSR 2028	\$20	\$74	\$137
No Purchases 2040	(\$2)	\$30	\$218
Pathway 1 Cost Allocation			
CEP Portfolio	\$3	<u>\$212 \$81</u>	<u>\$394 \$352</u>
CBRE	\$15	<u>\$227 </u>	<u>\$399 \$358 </u>
SSR 15%	\$3	<u>\$232 \$103</u>	<u>\$444 </u>
SSR 2028	\$20	<u>\$251 \$121</u>	<u>\$427 \$386</u>
No Purchases 2040	(\$2)	<u>\$201</u> \$72	<u>\$515</u>
Pathway 2 Cost Allocation			
CEP Portfolio	<u>\$12</u> \$30	<u>\$143 </u>	<u>\$204</u>
CBRE	<u>\$24</u>	<u>\$158 \$110</u>	<u>\$209 </u>
SSR 15%	<u>\$12</u>	<u>\$162 \$117</u>	<u>\$254 </u> \$343
SSR 2028	<u>\$29</u> \$46	<u>\$182 \$134</u>	<u>\$237 \$326</u>
No Purchases 2040	<u>\$7</u> \$24	<u>\$135</u>	<u>\$297 \$385</u>

Table 16 – Average Annual Cost Compared to the 2023 IRP Preferred Portfolio (\$millions)
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Community Based Renewable Energy

The CBRE portfolio assumes that 100 MW of CBRE resources replace 100 MW of small-scale renewables, and that the CBRE resources are eligible to be counted as small-scale for the purposes of meeting small-scale targets. This portfolio is used in the CBRE analysis presented in Chapter V on Community-Based Renewable Energy, and is presented here for completeness. The substitution of CBREs for small-scale renewables incurs a steep cost increase of \$131 million on a present value revenue requirement basis, or roughly \$1.3 million per megawatt of CBRE capacity.

As can be seen in the row labeled "CBRE" under the Pathway 1 section of Table 16, the costs of the CBRE portfolio compared to the preferred portfolio show up significantly in 2030 when the small-scale resources are built, however, the 100 MW of CBRE resource are added incrementally from 2026 to 2030. The CBRE portfolio costs an average of \$22796 million per year in each 2030 through 2039. In the last period from 2040 to 2042 (and beyond), the average annual cost increases to \$39958 million per year on a nominal basis. Over the last 13 years of the planning horizon, 2030-2042, the CBRE portfolio incurs approximately \$841 million more in total costs than in the preferred portfolio before considering emissions compliance; the net present value of these costs appears diminished to \$399 due to the time value of money. Under pathway 1 to compliance, the total increased nominal cost from 2030 to 2042 is \$3.472.03 billion. Under pathway 2 to compliance, the total increased nominal cost from 2030 to 2042 is \$2.210 billion.

SSR 15% (small-scale renewables increased to 15% by 2030)

This sensitivity examines the costs and benefits of increasing the amount of small-scale renewables adopted, where each year's small-scale selections increase by half, moving from 10 percent of Oregon capacity to 15 percent of Oregon capacity. No appreciable gains are noted in reliability, however CO₂ emissions are reduced by 1.7 million tons at an increased portfolio cost of 391123 million on a net present value basis, before consider emissions compliance. Under pathway 1, this sensitivity increases cost in the 2030-2039 period by an average of 232103 million per year, and 162117 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of 44402 million per year under pathway 1 and 254343 million per year under pathway 2.

SSR 2028 (small-scale renewables to meet 10% by 2028)

This sensitivity tests the impacts of early adoption of small-scale renewables from 2030 to 2028. This results in small emissions reduction, does not improve system reliability, and increases costs by \$265m533 million on a net present value basis, before considering emissions compliance. While early acquisition of small-scale resource appears uneconomic, PacifiCorp will appropriately pursue economic small-scale projects in its procurement processes. Under pathway 1, this sensitivity increases cost in the 2030-2039 period by an average of \$251121 million per year, and \$18234 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of \$427386 million per year under pathway 1 and \$237_326-million per year under pathway 2.

No Purchases 2040

In this sensitivity, no purchases are allowed for Oregon in years 2040-2042, in alignment with a strict view of zero emissions goals by year 2040. While the increased cost of \$45m over the 20-

year study period may not initially appear extreme, the impacts stem from cost changes in years 2040 through 2042 where the increased cost is more the \$100200 millionm per year. Under pathway 1, this sensitivity increase cost in the 2030-2039 period by an average of \$72-201 million per year, and \$88-135 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of \$473-515 million per year under pathway 1 and \$385-297 million per year under pathway 2.

Conclusion

The Company's economic analyses confirms that the least-risk, least-cost portfolio to serve as the basis to develop the Company's HB 2021 compliance strategies is the Small-Scale Renewable Portfolio as allocated to Oregon. This Oregon CEP portfolio, and the additional steps described in the two pathways discussed below, outline the Company's emission reduction strategies-

compliance, two additional pathways are shown (Pathway 1 and Pathway 2). These two pathways to emissions compliance are described in detail in the next chapter, Chapter VII. Any additional actions taken to make the CEP portfolio emissions-compliant will result in more incurred costs. These cost projections are estimates of the additional cost of compliance to Oregon customers and are in no way final, but present the Company's expectations of the reasonable range of possible costs.

As can be seen in the row labeled "CEP Portfolio" under the Pathway 1 section of the table, the costs of the additional small-scale begin to show up significantly in 2030 when the additional capacity is first built, with an average cost of cost of \$212 million per year in each year through 2039. In the last period from 2040 to 2042 (and beyond), the average annual cost increases to \$394 million per year on a nominal basis. Over the last 13 years of the planning horizon, 2030-2042, the CEP portfolio incurs approximately \$671 million more in total nominal costs than in the preferred portfolio before considering emissions compliance; the net present value of these incremental costs appears diminished to \$268 million due to the time value of money. Under pathway 1 to compliance, the total increased nominal cost from 2030 to 2042 is \$3.30 billion. Under pathway 2 to compliance, the total increased nominal cost from 2030 to 2042 is \$2.04 billion.

	Years 2023-2029	Years 2030-2039	Years 2040-2042
2023 IRP Preferred Portfolio	-	-	-
Base Cost Allocation Compared to	Preferred Portfolio		
CEP Portfolio	\$3	\$36	\$103
CBRE	\$15	\$51	\$109
SSR 15%	\$3	\$54	\$154
SSR 2028	\$20	\$74	\$137
No Purchases 2040	(\$2)	\$30	\$218
Pathway 1 Cost Allocation			
CEP Portfolio	\$3	\$212	\$394
CBRE	\$15	\$227	\$399
SSR 15%	\$3	\$232	\$444
SSR 2028	\$20	\$251	\$427
No Purchases 2040	(\$2)	\$201	\$515
Pathway 2 Cost Allocation			
CEP Portfolio	\$12	\$143	\$204
CBRE	\$24	\$158	\$209
SSR 15%	\$12	\$162	\$254
SSR 2028	\$29	\$182	\$237
No Purchases 2040	\$7	\$135	\$297

Table 16 – Average Annual Cost Compared to the 2023 IRP Preferred Portfolio (\$millions)

Community Based Renewable Energy

The CBRE portfolio assumes that 100 MW of CBRE resources replace 100 MW of small-scale renewables, and that the CBRE resources are eligible to be counted as small-scale for the purposes of meeting small-scale targets. This portfolio is used in the CBRE analysis presented in Chapter V on Community-Based Renewable Energy, and is presented here for completeness. The substitution of CBREs for small-scale renewables incurs a steep cost increase of \$131 million on a present value revenue requirement basis, or roughly \$1.3 million per megawatt of CBRE capacity.

As can be seen in the row labeled "CBRE" under the Pathway 1 section of Table 16, the costs of the CBRE portfolio compared to the preferred portfolio show up significantly in 2030 when the small-scale resources are built, however, the 100 MW of CBRE resource are added incrementally from 2026 to 2030. The CBRE portfolio costs an average of \$227 million per year in each 2030 through 2039. In the last period from 2040 to 2042 (and beyond), the average annual cost increases to \$399 million per year on a nominal basis. Over the last 13 years of the planning horizon, 2030-2042, the CBRE portfolio incurs approximately \$841 million more in total costs than in the preferred portfolio before considering emissions compliance; the net present value of these costs appears diminished to \$399 due to the time value of money. Under pathway 1 to compliance, the total increased nominal cost from 2030 to 2042 is \$3.47 billion. Under pathway 2 to compliance, the total increased nominal cost from 2030 to 2042 is \$2.21 billion.

SSR 15% (small-scale renewables increased to 15% by 2030)

This sensitivity examines the costs and benefits of increasing the amount of small-scale renewables adopted, where each year's small-scale selections increase by half, moving from 10 percent of Oregon capacity to 15 percent of Oregon capacity. No appreciable gains are noted in reliability, however CO₂ emissions are reduced by 1.7 million tons at an increased portfolio cost of \$391 million on a net present value basis, before consider emissions compliance. Under pathway 1, this sensitivity increases cost in the 2030-2039 period by an average of \$232 million per year, and \$162 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of \$444 million per year under pathway 1 and \$254 million per year under pathway 2.

SSR 2028 (small-scale renewables to meet 10% by 2028)

This sensitivity tests the impacts of early adoption of small-scale renewables from 2030 to 2028. This results in small emissions reduction, does not improve system reliability, and increases costs by \$533 million on a net present value basis, before considering emissions compliance. While early acquisition of small-scale resource appears uneconomic, PacifiCorp will appropriately pursue economic small-scale projects in its procurement processes. Under pathway 1, this sensitivity increases cost in the 2030-2039 period by an average of \$251 million per year, and \$182 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of \$427 million per year under pathway 1 and \$237 million per year under pathway 2.

No Purchases 2040

In this sensitivity, no purchases are allowed for Oregon in years 2040-2042, in alignment with a strict view of zero emissions goals by year 2040. While the increased cost of \$45m over the 20-year study period may not initially appear extreme, the impacts stem from cost changes in years 2040 through 2042 where the increased cost is more the \$200 million per year. Under pathway 1, this sensitivity increase cost in the 2030-2039 period by an average of \$201 million per year, and \$135 million per year under pathway 2. In the 2040-2042 period, costs increase by an average of \$515 million per year under pathway 1 and \$297 million per year under pathway 2.

Conclusion

The Company's economic analyses confirms that the least-risk, least-cost portfolio to serve as the basis to develop the Company's HB 2021 compliance strategies is the Small-Scale Renewable Portfolio as allocated to Oregon. This Oregon CEP portfolio, and the additional steps described in the two pathways discussed below, outline the Company's emission reduction strategies.

Clean Energy Plan Data Templates Pages 52, 58-59,62-63, 65-66, 68-69, & 71-72

Instructions

For each of the portfolios listed on the "Portfolios" tab, list the scoring metrics for cost, risk, GHG emissions reductions, and community benefits and impacts used to select the Preferred Portfolio and design the Action Plan

UM 2225 Order Summary/Rubric references: B.1

		Risk metric -		Total GHG Emissions	Community	Maintains 10% SSR Requirement	Meets Emissions Reduction Targets
	Cost - NPVRR	Variability	Risk metric - Severity	2023-2042	Impacts Metric(s)	Starting 2030	Starting in 2030
		Unserved	(Unserved Energy as				
Portfolio	(millions)	Energy)	a % of Load)	(MT CO2e)	(units)	(Yes/No)	(Yes/No)
1 CEP Portfolio-Pathway 1	\$12,840	21,851	0.00447%	56,802,395	Community	Yes	Yes
2 CEP Portfolio-Pathway 2	\$12,426	21,851	0.00447%	54,515,764	Impact Metric	cs Yes	Yes
3 CEP Portfolio 2020 protocol	\$11,810	21,851	0.00447%	62,936,978	are covered	No	No
4 2023 IRP Preferred Portfolio (May) 2020 Protocol	\$11,543	22,530	0.00461%	64,688,776	under "Risk	Yes	No
5 CBRE Scenario-Pathway 1	\$12,968	21,850	0.00447%	56,814,620	metric -	Yes	No
6 CBRE Scenario-Pathway 2	\$12,555	21,850	0.00447%	54,515,764	Variability",	Yes	Yes
7 CBRE Scenario	\$11,941	21,850	0.00447%	62,936,722	"Risk metric - Severity" and	Yes	No
8 15% SSR Target Scenario-Pathway 1	\$12,971	21,852	0.00447%	56,692,046	"Total GHG	Yes	Yes
9 15% SSR Target Scenario-Pathway 2	\$12,552	21,852	0.00447%	54,515,764	Emissions	Yes	Yes
10 15% SSR Target Scenario	\$11,934	21,852	0.00447%	62,633,160	2023-2042" to	yes	No
11 Accelerated SSR 2028 Target Scenario-Pathway 1	\$13,109	21,861	0.00447%	56,494,580	the left.	Yes	Yes
12 Accelerated SSR 2028 Target Scenario-Pathway 2	\$12,695	21,861	0.00447%	54,213,973		Yes	Yes
13 Accelerated SSR 2028 Target Scenario	\$12,075	21,861	0.00447%	62,559,652		Yes	No
14 No Purchases 2040 Scenario-Pathway 1	\$12,856	21,913	0.00448%	57,157,288		Yes	Yes
15 No Purchases 2040 Scenario-Pathway 2	\$12,437	21,913	0.00448%	54,823,534		Yes	No
16 No Purchases 2040 Scenario	\$11,855	21,913	0.00448%	63,308,673		Yes	No

Instructions

For each of the portfolios listed in the "Portfolios" tab, provide the following information under the Reference Case over the study period and for at least three historical years

- Total forecasted annual revenue requirement to serve Oregon customers

- Total forecasted annual revenue requirement to serve Oregon customers, divided by the total forecasted retail sales in Oregon

UM 2225 Order Summary/Rubric references: J.5(a)-(b)

1	CEP Portfolio-Pathway 1		
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon s	erve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	333	14,506,597	23
2024	536	16,307,041	33
2025	570	17,360,433	33
2026	789	17,873,416	44
2027	884	18,909,955	47
2028	1,076	20,294,420	53
2029	1,128	20,625,973	55
2030	1,268	20,598,436	62
2031	1,405	21,152,414	66
2032	1,376	21,356,002	64
2033	1,405	21,492,223	65
2034	1,500	21,677,527	69
2035	1,538	21,895,711	70
2036	1,672	22,180,065	75
2037	1,803	22,410,957	80
2038	1,932	22,705,996	85
2039	2,059	23,013,903	89
2040	2,132	23,357,876	91
2041	2,171	23,682,702	92
2042	2,445	24,050,913	102

Data repor Oregon all	rted in this section is ocated.		
2	CEP Portfolio-Pathway 2		
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon	serve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	315	14,506,597	22
2024	492	16,307,041	30
2025	505	17,360,433	29
2026	895	17,873,416	50
2027	951	18,909,955	50
2028	1,086	20,294,420	54
2029	1,136	20,625,973	55
2030	1,258	20,598,436	61
2031	1,373	21,152,414	65
2032	1,332	21,356,002	62
2033	1,339	21,492,223	62
2034	1,424	21,677,527	66
2035	1,458	21,895,711	67
2036	1,604	22,180,065	72
2037	1,731	22,410,957	77
2038	1,828	22,705,996	80
2039	1,924	23,013,903	84
2040	1,957	23,357,876	84
2041	1,994	23,682,702	84
2042	2,227	24,050,913	93

Data repor Oregon all	rted in this section is ocated.		
5	CBRE Scenario-Pathway 1		
	Total revenue	1	Total revenue requirement to
	requirement to serve	Total Oregon	serve Oregon customers, divided by
	Oregon customers	-	the total retail sales in Oregon
Year	(million nominal \$)		(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	333	14,506,597	23
2024	540	16,307,041	33
2025	577	17,360,433	33
2026	800	17,873,416	45
2027	903	18,909,955	48
2028	1,096	20,294,420	54
2029	1,149	20,625,973	56
2030	1,282	20,598,436	62
2031	1,418	21,152,414	67
2032	1,391	21,356,002	65
2033	1,420	21,492,223	66
2034	1,516	21,677,527	70
2035	1,554	21,895,711	71
2036	1,688	22,180,065	76
2037	1,818	22,410,957	81
2038	1,947	22,705,996	86
2039	2,073	23,013,903	90
2040	2,138	23,357,876	92
2041	2,176	23,682,702	92
2042	2,450	24,050,913	102

Determent			
	ed in this section is		
Oregon alloc			
6 CE	3RE Scenario-Pathway 2		
	Total revenue		Total revenue requirement to
	requirement to serve	•	serve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	315	14,506,597	22
2024	495	16,307,041	30
2025	512	17,360,433	29
2026	905	17,873,416	51
2027	970	18,909,955	51
2028	1,105	20,294,420	54
2029	1,157	20,625,973	56
2030	1,273	20,598,436	62
2031	1,387	21,152,414	66
2032	1,347	21,356,002	63
2033	1,354	21,492,223	63
2034	1,439	21,677,527	66
2035	1,473	21,895,711	67
2036	1,620	22,180,065	73
2037	1,747	22,410,957	78
2038	1,843	22,705,996	81
2039	1,939	23,013,903	84
2040	1,963	23,357,876	84
2041	1,999	23,682,702	84
2042	2,232	24,050,913	93

81	5% SSR Target Scenario-Pat	hway 1	
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon sei	rve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	333	14,506,597	23
2024	537	16,307,041	33
2025	570	17,360,433	33
2026	789	17,873,416	44
2027	882	18,909,955	47
2028	1,078	20,294,420	53
2029	1,128	20,625,973	55
2030	1,282	20,598,436	62
2031	1,418	21,152,414	67
2032	1,397	21,356,002	65
2033	1,435	21,492,223	67
2034	1,523	21,677,527	70
2035	1,563	21,895,711	71
2036	1,693	22,180,065	76
2037	1,821	22,410,957	81
2038	1,950	22,705,996	86
2039	2,074	23,013,903	90
2040	2,177	23,357,876	93
2041	2,217	23,682,702	94
2042	2,504	24,050,913	104

9	15% SSR Target Scenario-Pa	athway 2	
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon	serve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	315	14,506,597	22
2024	492	16,307,041	30
2025	505	17,360,433	29
2026	895	17,873,416	50
2027	948	18,909,955	50
2028	1,086	20,294,420	54
2029	1,136	20,625,973	55
2030	1,273	20,598,436	62
2031	1,386	21,152,414	66
2032	1,352	21,356,002	63
2033	1,365	21,492,223	63
2034	1,447	21,677,527	67
2035	1,481	21,895,711	68
2036	1,624	22,180,065	73
2037	1,749	22,410,957	78
2038	1,846	22,705,996	81
2039	1,939	23,013,903	84
2040	2,003	23,357,876	86
2041	2,040	23,682,702	86
2042	2,286	24,050,913	95

11	Accelerated SSR 2028 Targe	et Scenario-Pathwa	ау 1
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon se	erve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	333	14,506,597	23
2024	537	16,307,041	33
2025	570	17,360,433	33
2026	789	17,873,416	44
2027	884	18,909,955	47
2028	1,133	20,294,420	56
2029	1,184	20,625,973	57
2030	1,304	20,598,436	63
2031	1,439	21,152,414	68
2032	1,404	21,356,002	66
2033	1,432	21,492,223	67
2034	1,523	21,677,527	70
2035	1,561	21,895,711	71
2036	1,694	22,180,065	76
2037	1,824	22,410,957	81
2038	2,018	22,705,996	89
2039	2,151	23,013,903	93
2040	2,173	23,357,876	93
2041	2,212	23,682,702	93
2042	2,462	24,050,913	102

12	Accelerated SSR 2028 Targe	et Scenario-Pathwa	ay 2
	Total revenue		Total revenue requirement to
	requirement to serve	Total Oregon se	erve Oregon customers, divided by
	Oregon customers	retail sales	the total retail sales in Oregon
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)
2019	n/a	13,088,664	n/a
2020	n/a	12,993,459	n/a
2021	n/a	13,510,323	n/a
2022	n/a	13,700,592	n/a
2023	315	14,506,597	22
2024	492	16,307,041	30
2025	505	17,360,433	29
2026	895	17,873,416	50
2027	951	18,909,955	50
2028	1,145	20,294,420	56
2029	1,195	20,625,973	58
2030	1,294	20,598,436	63
2031	1,406	21,152,414	66
2032	1,359	21,356,002	64
2033	1,364	21,492,223	63
2034	1,447	21,677,527	67
2035	1,481	21,895,711	68
2036	1,626	22,180,065	73
2037	1,752	22,410,957	78
2038	1,915	22,705,996	84
2039	2,015	23,013,903	88
2040	1,999	23,357,876	86
2041	2,035	23,682,702	86
2042	2,244	24,050,913	93

14 No Purchases 2040 Scenario-Pathway 1					
	Total revenue		Total revenue requirement to		
	requirement to serve	Total Oregon	serve Oregon customers, divided by		
	Oregon customers	retail sales	the total retail sales in Oregon		
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)		
2019	n/a	13,088,664	n/a		
2020	n/a	12,993,459	n/a		
2021	n/a	13,510,323	n/a		
2022	n/a	13,700,592	n/a		
2023	333	14,506,597	23		
2024	536	16,307,041	33		
2025	571	17,360,433	33		
2026	785	17,873,416	44		
2027	883	18,909,955	47		
2028	1,053	20,294,420	52		
2029	1,120	20,625,973	54		
2030	1,223	20,598,436	59		
2031	1,348	21,152,414	64		
2032	1,356	21,356,002	63		
2033	1,407	21,492,223	65		
2034	1,499	21,677,527	69		
2035	1,538	21,895,711	70		
2036	1,670	22,180,065	75		
2037	1,802	22,410,957	80		
2038	1,937	22,705,996	85		
2039	2,068	23,013,903	90		
2040	2,239	23,357,876	96		
2041	2,292	23,682,702	97		
2042	2,581	24,050,913	107		

15 No Purchases 2040 Scenario-Pathway 2					
	Total revenue		Total revenue requirement to		
	requirement to serve	Total Oregon	serve Oregon customers, divided by		
	Oregon customers	retail sales	the total retail sales in Oregon		
Year	(million nominal \$)	(MWh)	(nominal \$/MWh)		
2019	n/a	13,088,664	n/a		
2020	n/a	12,993,459	n/a		
2021	n/a	13,510,323	n/a		
2022	n/a	13,700,592	n/a		
2023	315	14,506,597	22		
2024	492	16,307,041	30		
2025	506	17,360,433	29		
2026	890	17,873,416	50		
2027	951	18,909,955	50		
2028	1,061	20,294,420	52		
2029	1,128	20,625,973	55		
2030	1,233	20,598,436	60		
2031	1,342	21,152,414	63		
2032	1,319	21,356,002	62		
2033	1,337	21,492,223	62		
2034	1,421	21,677,527	66		
2035	1,456	21,895,711	66		
2036	1,602	22,180,065	72		
2037	1,728	22,410,957	77		
2038	1,828	22,705,996	81		
2039	1,926	23,013,903	84		
2040	2,039	23,357,876	87		
2041	2,086	23,682,702	88		
2042	2,331	24,050,913	97		