

September 5, 2025

Lauren R. Barros
LRB@LaurenBarrosLaw.com (C)

Sarah Wright
sarah@utahcleanenergy.org (C)

Logan Mitchell
logan@utahcleanenergy.org (C)

Jenn Bodine
jbodine@utahcleanenergy.org (C)

Josh Craft
josh@utahcleanenergy.org (C)

Kevin Emerson
kevin@utahcleanenergy.org (C)

Sierra Goodridge
sierra@utahcleanenergy.org (C)

Jennifer Eden
jennifer@utahcleanenergy.org (C)

RE: UT Docket No. 25-035-22
UCE 2nd Set Data Request (1-5)

Please find enclosed Rocky Mountain Power's Responses to UCE 2nd Set Data Requests 2.1-2.5 as well as attachment UCE 2.2.

If you have any questions, please call me at (801) 220-2823.

Sincerely,

_____/s/_____
Jana Saba
Manager, Regulation
Enclosures
Cc:

Madison Galt/DPU dpudatarequest@utah.gov mgalt@utah.gov (C)
Bela Vastag/OCS bvastag@utah.gov (C)

Alyson Anderson/OCS akanderson@utah.gov (C)
Alex Ware/OCS aware@utah.gov (C)
Jennifer Dean jmdean@utah.gov OCS@utah.gov (C)
Phillip J. Russell prussell@jdrslaw.com (C)
Don Hendrickson dhendrickson@energystrat.com (C)
Matt Gerhart/SC matt.gerhart@sierraclub.org (C)
Rose Monahan/SC rose.monahan@sierraclub.org (C)
Thomas Phillips/SC thomas.phillips@sierraclub.org (C)
Karl Boothman/WRA karl.boothman@westernresources.org (C)
Sophie Hayes/WRA sophie.hayes@westernresources.org (C)
Jessica Loeloff/WRA jessica.loeloff@westernresources.org (C)
Nancy Kelly/WRA nancy.kelly@westernresources.org (C)

UCE Data Request 2.1

In UCE's [Stakeholder Feedback Form from January 14, 2025](#), UCE made the following request:

“Lastly, Figure 9.12 shows Oregon allocated emission reductions relative to HB2021 target. We request companion figures that show how emissions in the rest of PacifiCorp’s states and each state individually change as a result of this allocation to Oregon.”

The Company responded and said:

“PacifiCorp is actively looking for helpful ways to present emissions data in the final 2025 IRP and will consider this request to present state-level emissions data.”

However, the final 2025 Integrated Resource Plan (hereinafter “IRP”), does not present state-level emissions data, other than for Oregon. In its response to Western Resource Advocates’ data request 2.4 seeking the 2025 IRP reported emissions for jurisdictions other than Oregon, the Company stated:

“PacifiCorp does not report emissions by jurisdiction for Washington or Utah, Idaho, Wyoming and California (UIWC) for the 2025 Integrated Resource Plan (IRP) preferred portfolio, neither in published 2025 IRP nor in the supporting work papers.”

Therefore, UCE requests that the Company calculate and report system emissions by jurisdiction for Washington and Utah, Idaho, Wyoming, and California (UIWC), in the aggregate and by state.

- (a) Please provide these system jurisdictional emissions data and supporting work papers in a non-confidential format.
- (b) If the system jurisdictional emissions data relies on confidential information, please, in addition to the non-confidential format, provide a confidential version of the Washington and UIWC data with supporting work papers.

Response to UCE Data Request 2.1

PacifiCorp objects to this data request on the grounds that it would require a special study to produce such information and is therefore overly broad and unduly burdensome. Subject to and without waiving the foregoing objection, the Company responds as follows:

- (a) PacifiCorp has not prepared the requested analysis. There is no approved methodology for assigning all of the forecasted emissions in a given year

among the six states or three jurisdictions (as defined in PacifiCorp's 2025 Integrated Resource Plan (IRP)) in PacifiCorp's system. The Oregon Department of Environmental Quality (DEQ) has approved a specific methodology for calculating Oregon-allocated emissions, and a forecast of Oregon-allocated emissions is necessary to determine PacifiCorp's path towards compliance with emissions reduction standards established by House Bill (HB) 2021.

(b) Please refer to the Company's response to subpart (a) above.

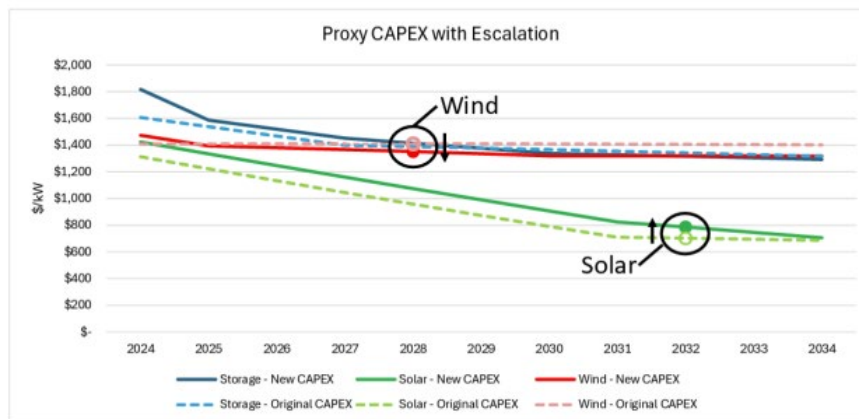
UCE Data Request 2.2

In its response to Western Resource Advocates' data request 2.6, the Company stated (emphasis added):

“Modeling in the 2025 IRP incorrectly applied factors based on 2024 commercial operation date (COD) technology costs. In the 2025 IRP supply-side resource table, escalation rates for each proxy resource option did not align with the earliest commercial operation year, but instead, all escalation rates began in 2025, rather than in the first year available, as intended.

PacifiCorp identified and corrected this error following the completion of the 2025 IRP modeling and has presented this correction in multiple public forums, an example of which is on slides 15 and 16 of the public 2025 Oregon Clean Energy Plan (CEP) presentation: [OR CEP Meeting 2025-05 May Slides.pdf](#). The impact of this correction on the total resource cost (TRC) for any given proxy resource option is minimal as the CAPEX costs are only a portion of the TRC and the correction had less than a 10 percent impact on CAPEX costs for any given proxy resource option.”

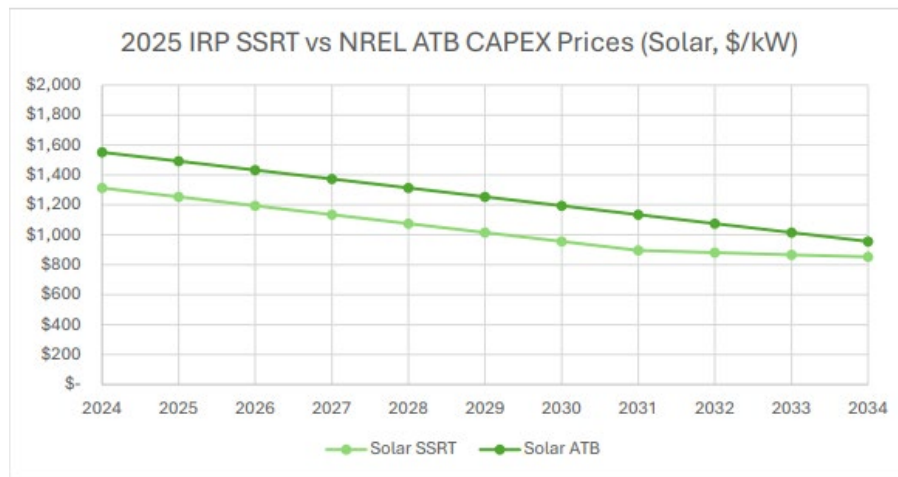
The same figure that the Company presented in the public 2025 Oregon CEP presentation was also produced in Utah Docket No. [25-035-T03 technical conference](#) on June 18th on slide 5. For clarity in this data request, here is that “Proxy CAPEX with Escalation” figure:



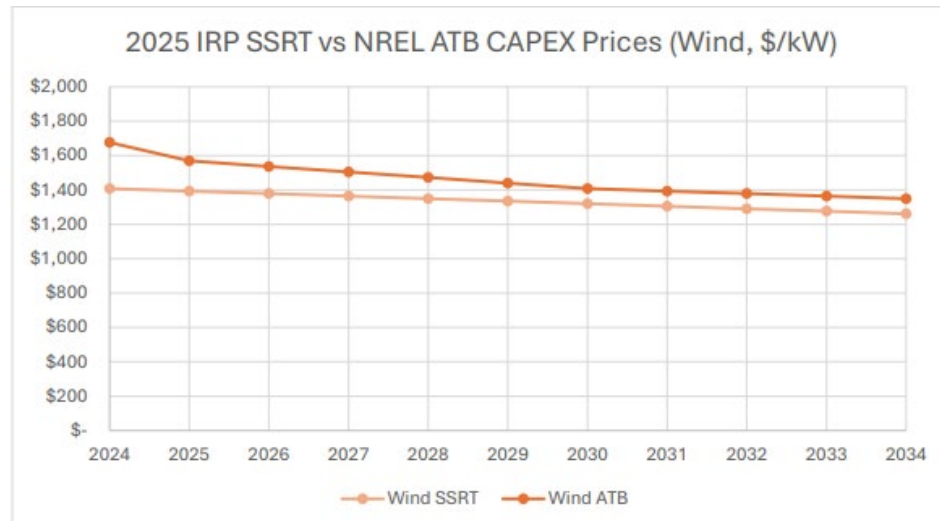
UCE has attempted to independently reproduce this figure but discovered that the Company's New CAPEX values still differ from the NREL ATB. UCE downloaded and reproduced the NREL ATB 2024 Data (<https://atb.nrel.gov/electricity/2024/data>) and plotted the actual NREL ATB 2024 data along with the original 2025 IRP Supply Side Resource Table (SSR Table) that the Company has identified as being erroneous. First, for example, are these two data sets for solar:

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UCE Data Request 2.2



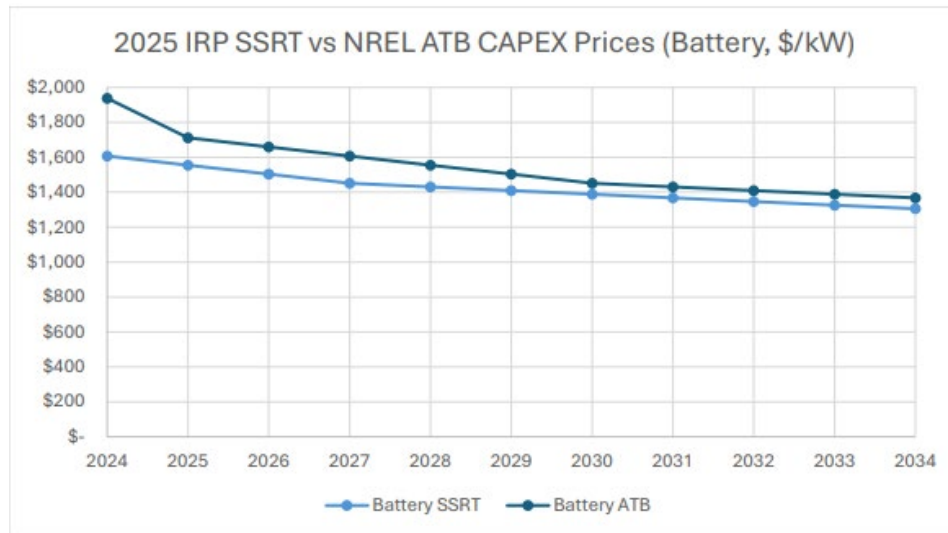
Upon close examination, the Company's "Solar – New CAPEX" data in their "Proxy CAPEX with Escalation" figure does not match the NREL ATB data. Take, for example, the resource costs in a specific year, in this case the year 2024. In the Company's updated "Proxy CAPEX with Escalation" figure for the year 2024, "Solar – New CAPEX" is approximately \$1400/kW, whereas the NREL ATB 2024 database reproduced in UCE's figure, in 2024 "Solar ATB" is \$1551.27/kW. Below is the same comparison for wind:



In the Company's "Proxy CAPEX with Escalation" figure for 2024 "Wind – New CAPEX" is approximately \$1500/kW, whereas the NREL ATB 2024 database shown in UCE's figure, in 2024 "Wind ATB" at \$1676.09/kW. Below is the same comparison figure for Li-Ion, 4-hour battery storage:

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Again, in the Company’s “Proxy CAPEX with Escalation” figure in 2024 “Storage – New CAPEX” is approximately \$1800/kW, whereas the NREL ATB 2024 database shown in UCE’s figure, in 2024 “Battery ATB,” is \$1938.20/kW.

For reference, the image below provides a tabular version of the data plotted above in UCE’s figures, which show that the Company’s original SSR Table figures are offset from the NREL ATB database by the difference between the Availability Year and the COD Year. For each resource the first row lists the Company’s SSR Table (RMP SSRT). Row three lists the NREL ATB for that same resource. Below that is the difference between them when accounting for the year offset. Notice that the difference in each year is exactly equal to \$0.00. This indicates that the SSRT values were not modified, only offset by the COD year. The years are color coded to visually aid the year-by-year comparison of the shifted values (e.g. for solar, the 2024 SSR Table is the same as the NREL ATB 2028 value).

	Fuel	Resource	Available	COD Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
RMP SSRT	Solar	200 MW, Class 1-10	2025	2028	\$1,312.74	\$1,255.31	\$1,199.48	\$1,143.65	\$1,074.22	\$1,014.99	\$955.52	\$895.52	\$834.34	\$772.00	\$708.54	\$643.94	\$578.18
NREL ATB	Utility PV - Class 5	Moderate			\$1,554.27	\$1,491.64	\$1,432.01	\$1,372.38	\$1,312.74	\$1,253.11	\$1,193.48	\$1,133.85	\$1,074.22	\$1,014.59	\$954.96	\$895.32	\$835.69
Offset Year Difference								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
			Available	COD Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
RMP SSRT	Storage	Lithium, 4-hour, 200 MW	2025	2027	\$1,007.38	\$1,555.36	\$1,503.34	\$1,451.32	\$1,435.55	\$1,409.75	\$1,385.95	\$1,368.18	\$1,347.41	\$1,326.61	\$1,305.81		
NREL ATB	Utility-Scale Battery Storage - 4hr	Moderate			\$1,938.20	\$1,711.40	\$1,650.39	\$1,600.38	\$1,555.36	\$1,503.34	\$1,451.32	\$1,400.53	\$1,400.75	\$1,360.98	\$1,368.53	\$1,347.40	\$1,320.61
Offset Year Difference								\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
			Available	COD Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
RMP SSRT	Wind	Wind Class 2-6, 200 MW	2025	2030	\$1,407.95	\$1,305.30	\$1,378.65	\$1,364.00	\$1,340.34	\$1,334.69	\$1,320.04	\$1,305.39	\$1,290.74	\$1,276.08	\$1,261.43		
NREL ATB	Land-Based Wind - Moderate				\$1,670.09	\$1,569.10	\$1,536.87	\$1,504.64	\$1,472.41	\$1,440.18	\$1,407.95	\$1,375.73	\$1,343.50	\$1,311.27	\$1,279.04	\$1,246.81	\$1,214.58
Offset Year Difference											\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

As the Company’s new CAPEX values do not align with the NREL ATB 2024 database (as seen in the Company’s “Proxy CAPEX with Escalation” figure), UCE requests the following:

- (a) Please provide the work papers and any supporting documents behind the “Proxy CAPEX with Escalation” figure (shown above) that the Company has presented as the corrected Supply Side Resource Table input.
- (b) Please explain why the corrected Supply Side Resource Table input shown in the “Proxy CAPEX with Escalation” figure (shown above) is different than that shown in the NREL ATB 2024 database.

Response to UCE Data Request 2.2

- (a) Please refer to Attachment UCE 2.2 which provides the work paper supporting the “Proxy CAPEX with Escalation” figure shown on page 1 of this data request.
- (b) PacifiCorp clarifies that the values shown in the “Proxy CAPEX with Escalation” figure shown above do not represent corrected supply-side resource table build cost inputs. In its 2025 Integrated Resource Plan (IRP) supply-side resource table, PacifiCorp calculated proxy build costs using the overnight capital costs stated in National Renewable Energy Laboratory’s (NREL) 2024 Annual Technology Baseline (ATB) and applied PacifiCorp-specific adjustments for property tax, surcharge and allowance for funds used during construction (AFUDC). The capital expenditure (CAPEX) costs stated in NREL’s 2024 ATB were not used to calculate the proxy build costs presented in PacifiCorp’s 2025 IRP supply-side resource table except for calculating the technology cost escalation rates applied to NREL’s overnight capital costs.

The “Proxy CAPEX with Escalation” figure is intended to show a correction PacifiCorp made to appropriately account for an error PacifiCorp identified in its 2025 IRP where escalation rates for each proxy resource option did not align with the earliest commercial operation year, but instead, all escalation rates began in 2025. The figure shows the impact of recalculated escalation rates on NREL CAPEX values stated on tab “Costs Forecasts”.

PacifiCorp recognizes the confusion regarding how NREL’s 2024 ATB costs were represented in its 2025 IRP supply-side resource table and looks forward to continuing to enhance its supply-side resource table for the 2025 IRP Update and 2027 IRP.

UCE Data Request 2.3

Page 166 of the 2025 IRP states: The 2025 IRP capital cost estimates for solar resources are based on the ATB forecast.

This text states that the 2025 IRP CAPEX costs are based on the NREL ATB forecast. The text does not describe any deviations from the NREL ATB forecast. If there are indeed any deviations in the Company's "corrected" CAPEX price forecast identified in the previous data request (UCE Data Request 2.2, above), please indicate where the 2025 IRP explains these deviations. If the 2025 IRP did not explain the deviations, please explain why the explanation was omitted.

Response to UCE Data Request 2.3

For further information related to how the National Renewable Energy Laboratory (NREL) capital expenditure (CAPEX) costs were used in PacifiCorp's 2025 Integrated Resource Plan (IRP) supply-side resource table, refer to the Company's response to UCE Data Request 2.2. PacifiCorp's methodology for calculating build costs in the 2025 IRP supply-side resource table was briefly covered at PacifiCorp's 2025 IRP July 17, 2025 / July 18, 2025 public input meeting, slide 60.

The excerpt "The 2025 IRP capital cost estimates for solar resources are based on the ATB forecast" specifically relates to Figure 7.1 in PacifiCorp's 2025 IRP which shows a history of capital cost forecasts used in the supply-side resource table for photovoltaic (PV) resources in Utah from 2017 through 2023 IRPs, along with the updated PV capital cost forecast for the 2025 IRP. PacifiCorp recognizes the difficulty stakeholders may have in identifying how NREL's 2024 Annual Technology Baseline (ATB) was utilized in PacifiCorp's 2025 IRP supply-side resource table and looks forward to enhancing the supply-side resource table for better understanding and clarity in the 2025 IRP Update and 2027 IRP.

UCE Data Request 2.4

Regarding the error identified in the Company's response to Western Resource Advocates' data request 2.6 (quoted above in UCE Data Request 2.2) affecting the Company's 2025 IRP Supply Side Resource Table:

Please identify whether this Supply Side Resource table error was included in every 2025 IRP modeling variant.

Response to UCE Data Request 2.4

Yes. The escalation rate error PacifiCorp identified in its 2025 Integrated Resource Plan (IRP) supply-side resource table technology cost escalation rates were included in all 2025 IRP model runs.

UCE Data Request 2.5

Did the Company compare their load forecast to any peer utilities' forecast, any regional load forecast, or any other independent load forecast? If so, please indicate which forecasts the Company used. If not, please explain why the Company failed to conduct any comparisons with independent load forecasts.

Response to UCE Data Request 2.5

No. Comparing forecasts based on differing data sources, geographies, objectives and assumptions is time-consuming, problematic and not guaranteed to produce reliable information that is useful to the Company's forecasting effort. For example: even though the Company uses the same methodology for each of its states, the loads are not comparable. Wyoming has a very high concentration of industrial load relative to Oregon, and even though Utah and Oregon have similar relative weights between classes, Utah has a very high saturation of gas heating while Oregon's is relatively low. PacifiCorp's forecasts are based on the Company's specific customer historical performance, regional economic forecasts from Global Insights, Company customer surveys and information derived from specific customer plans. This information is proprietary and no other peer utility, regional load forecast or independent load forecast is based on comparable data. However, the Company regularly compares methodologies with peer utilities through participation in groups such as the Pacific Northwest Utilities Conference Committee (PNUCC), Itron and other discussions with peer utilities forecasting teams.