PacifiCorp - Stakeholder Feedback Form

2023 Integrated Resource Plan

PacifiCorp (the Company) requests that stakeholders provide feedback to the Company upon the conclusion of each public input meeting and/or stakeholder conference calls, as scheduled. PacifiCorp values the input of its active and engaged stakeholder group, and stakeholder feedback is critical to the IRP public input process. PacifiCorp requests that stakeholders provide comments using this form, which will allow the Company to more easily review and summarize comments by topic and to readily identify specific recommendations, if any, being provided. Information collected will be used to better inform issues included in the 2023 IRP, including, but not limited to the process, assumptions, and analysis. In order to maintain open communication and provide the broader Stakeholder community with useful information, the Company will generally post all appropriate feedback on the IRP website unless you request otherwise, below.

Date of Submittal May 1, 2023

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*Organization: Vote Solar

Address: 299 S. Main St. Suite 1300, PMB 93601

City: Salt Lake City State: Utah Zip: 84111

Public Meeting Date comments address: Check here if not related to specific meeting [X]

List additional organization attendees at cited meeting:

*__IRP Topic(s) and/or Agenda Items:__ List the specific topics that are being addressed in your comments.

- Appendix L, Private Generation Study prepared by DNV. **Vote Solar recommends clarifying and updating the assumptions used for the private generation forecast** in order to (1) account for all provisions from the Inflation Reduction Act that influence the cost of private generation resources, (2) explain how the Utah Export Credit Rate annual update was modeled across the forecast period, (3) model an alternate "high" private generation forecast that will yield more useful information regarding the effects of private generation on selection and timing of portfolio resource additions, and (4) account for the possibility that transmission construction and interconnection delays drive increased use of behind-the-meter private generation resources.

☐ Check here if you do **not** want your Stakeholder feedback and accompanying materials posted to the IRP website.

*__Respondent Comment:__ Please provide your feedback for each IRP topic listed above.

1) The Inflation Reduction Act (IRA) includes many provisions that will impact the adoption rate of rooftop solar and battery storage technology. The Private Generation Forecast assessment completed by DNV accounts for the extension of Federal tax credits for private generation resources in the base case[1], but there are many additional provisions of the Inflation Reduction Act that affect the costs of rooftop solar and storage**. Please clarify whether each of the following programs or provisions of the IRA are accounted for in the technology cost projections used in the private generation forecasts?**
   - Additional 10% credit for meeting domestic content requirements
   - Additional 10% credit for projects that are located in an "energy community"
   - Provisions of the Section 48(e) Environmental Justice Wind and Solar Program, including:

[1] PacifiCorp 2023 Integrated Resource Plan, Appendix L – Private Generation Study, Page 11

* Required fields

- Category 1) Additional 10% credit for qualified solar facilities located in a low-income community
- Category 2) Additional 10% credit for qualified solar facilities on Tribal land
- Category 3) Additional 20% credit for projects that are part of a qualified low-income residential building project
- Category 4) Additional 20% credit for projects that deliver qualified low-income economic benefits

- $29 billion Greenhouse Gas Reduction Fund

Answer: Our study does not estimate the content and location (beyond the State level) of proxy customer private generation resource installations and therefore does not include explicit assumptions around these credits.

2) The Private Generation Forecast assessment completed by DNV assumes that Utah's net billing policies would remain in place throughout the study.[2] The Export Credit Rate (Schedule 137) for solar customers in Utah is re-calculated annually based on updated inputs from the 12 months beginning July 1 and ending June 30 for the prior year. **Please describe how the Export Credit Rate was modeled in DNV's analysis and the assumptions used to forecast how the value of the Export Credit Rate will change over time.**

Answer: The export credit was modeled based on the rate determined in the 2021 export credit proceeding as it was the most recent approved rate. DNV escalates forecasted export credits at the same rate as retail rates in the analysis. The escalation rates for both retail prices and export credits are based on AEO2022 rate forecasts.

3) DNV's assessment finds that finds that the lower technology costs and higher energy prices used to model the "high" private generation forecast have a negligible effect on private generation adoption, and only result in only 0.5% additional cumulative capacity compared to the base case. Given the small difference between the "base" and "high" cases, Sensitivities S-05 and S-02 do not provide meaningful information about how higher than forecast private generation adoption affcts the timing and nature of resource decisions from the preferred portfolio. Further, if the "high" case does not account for all of the aforementioned provisions of the IRA then it likely under-estimates private generation adoption. **Vote Solar requests use of an alternate "high" private generation scenario for Sensitivity S-05 and S-02.** The private generation forecast developed for the 2021 IRP found that cumulative installed capacity for the "high" forecast of private generation was 52.6% higher than the "base" forecast across the 20 year study period.[3] **Vote Solar requests evaluation of a "high" private generation scenario that is 25% - 52.6% higher than the "base" scenario, which will result in an additional 795 - 1,673 MW of private generation capacity by 2042.**

Answer: Thank you for the feedback, we will take this into consideration for future planning cycles and work to develop a more robust "high case" for future evaluation.

4) Use of Vote Solar's recommended adoption forecast as the "high" scenario will result in more meaningful information about how private generation adoption influences portfolio selection. Additionally, PacifiCorp's 2023 Integrated Resource Plan identifies a need for substantial additions of new energy resources (including over 9 GW of wind, 8 GW of storage, nearly 7 GW of solar, 500 MW of nuclear, and over 1 GW of "non-emitting peaker" resources), as well as more than 1,100 miles of new transmission resources.[4] The U.S. Department of Energy has identified the high costs and long wait times

[2] PacifiCorp 2023 Integrated Resource Plan, Appendix L – Private Generation Study, Page 24
[3] PacifiCorp 2021 Integrated Resource Plan, Appendix L – Private Generation Study, Page 2. "In the base scenario, Navigant estimates approximately 1.9 GW AC of PG capacity will be installed in PacifiCorp's territory from 2021-2040.7 As shown in Figure 2, the low and high scenarios project a cumulative installed capacity of 1.0 GW AC and 2.9 GW AC, respectively."
[4] PacifiCorp 2023 Integrated Resource Plan, Chapter 1 – Executive Summary, Page 2.

to build transmission projects and complete interconnections as a significant challenge to meeting future clean energy goals, stating "*Current costs and procedures for connecting to the grid cannot accommodate the rapid increase in clean energy projects, resulting in lengthy interconnection wait times, many projects withdrawing from interconnection queues prior to being completed, and uncertainty for project developers.*"[5] Behind-the-meter private generation resources do not require interconnection to the transmission grid, and so higher private generation capacity is one option that could afford PacifiCorp additional flexibility to meet its customers' energy needs in a timely manner in the face of transmission construction and interconnection delays. It is valuable to use a "high" forecast scenario that is meaningfully different from the "base" scenario in Sensitivity S-05 and S-02 to better understand this dynamic.

Answer: Thank you for the feedback, we will take this into consideration for future planning cycles.

Data Support: If applicable, provide any documents, hyper-links, etc. in support of comments. (i.e. gas forecast is too high - this forecast from EIA is more appropriate). If electronic attachments are provided with your comments, please list those attachment names here.

Recommendations: Provide any additional recommendations if not included above - specificity is greatly appreciated.

Please submit your completed Stakeholder Feedback Form via email to IRP@Pacificorp.com

Thank you for participating.

[5] U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. (October 17, 2022). *DOE Launches New Initiative to Improve Clean Energy Interconnection.* Available at: https://www.energy.gov/eere/wind/articles/doe-launches-new-initiative-improve-clean-energy-interconnection.

* Required fields