

PacifiCorp - Stakeholder Feedback Form

2021 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 2021 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 2020-08-06

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Title:

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State: UT

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Public Meeting Date comments address: 07-30-2020

Check here if not related to specific meeting

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.

Load Forecast; DER Impact Tool; Supply Side resources; Navigant's private generation analysis

Check here if any of the following information being submitted is copyrighted or confidential.

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. Please provide any and all information related to the EV forecast used to estimate increased energy sales from electric vehicles in the load forecast, including, but not limited to, any workpapers, analysis and reports.

PacifiCorp Response:

PacifiCorp uses a state specific approach in forecasting electric-vehicle (EV) penetration within its service territory. Projections first evaluate historical EV penetration within the Company's service territory and then apply third-party EV growth projections and adjustments for factors unique to each state. Please see Attachment UCE-1 for the transportation electrification projections used to adjust the sales forecast.

2. Please provide any and all information related to the building electrification forecast used to estimate increased sales as a result of building electrification in the load forecast, including, but not limited to, the technologies or measures included, rate schedules affected by the building electrification forecast, and any workpapers, analysis and reports.

PacifiCorp Response:

Given the outcome of House Bill 421 in Utah, the Company has incorporated its expectation for the incentivizing of future heat pump acquisition in the state. Please see Attachment UCE-2 for the transportation electrification projections used to adjust the sales forecast.

* Required fields

3. Did PacifiCorp create a forecast for air-source heat pumps for the 2021 IRP? If so, please provide any and all information related to such forecast, including, but not limited to, any workpapers, analysis and reports.

PacifiCorp Response:

Yes, air-source heat pumps are included as measures in the Conservation Potential Assessment (CPA) for the 2021 Integrated Resource Plan (IRP). This information will be provided with the CPA database of measures and results once complete.

4. Related to the DER Impact Tool, please describe in detail how Rocky Mountain Power implements this tool in Utah. Please include in your response answers to the following questions: If a DER is identified through the DER Impact Tool, how does RMP go about installing the resource/measure? do you utilize existing DSM programs and tariffs or is this a separate process? How is the resource/measure paid for? How many projects have been identified and installed using the DER Impact Tool in Utah to date? How many non-wires solutions have been evaluated?

PacifiCorp Response:

The distributed energy resource (DER) Impact Tool is used to screen DER alternative solutions of solar, battery, battery plus solar and DSM direct load control. When evaluating solutions for an identified system issue, a transmission or distribution planning engineer utilizes the tool, providing inputs specific to the system issue at hand, to evaluate the feasibility of a DER alternative alongside a proposed traditional solution. If the DER alternative solution is evaluated as feasible and within 25 percent of the cost of the traditional solution, it is flagged for further study. Otherwise, it is included as an alternative evaluated in the traditional solution project justification documentation.

One project has been identified and constructed as a result of the DER Impact tool in Utah. The Panguitch solar and battery project was developed after the DER alternative analysis indicated a battery solution would be a viable alternative to a transmission line rebuild. The project was funded utilizing the sustainable transportation and energy plan (STEP) and was recently placed in service.

DSM related analyses with the DER Impact Tool have shown DSM to be an infeasible solution as it typically does not provide enough capacity to be effective in deferring traditional solutions.

The number of system issues that have been evaluated utilizing the DER Impact tool is not readily available. Given the number of projects currently in the 10 year plan and those that have been completed since the tool's implementation in 2016, the number is likely more than 50.

5. Could you please confirm that by \u001Csolar\u001D on slide 27 of the July 30-31 meeting materials you mean PV solar, not Concentrated Solar Power. If this is correct, and you are not considering CSP, please explain why you are not considering CSP.

PacifiCorp Response:

Correct, the 2021 IRP only includes photovoltaic (PV) single-axis tracking solar as a representative solar resource. Previous IRP's considered concentrated solar power (CSP) as well as other solar options until it became apparent in the 2017 IRP that single-axis tracking PV was the most cost-competitive solar option.

6. If you are considering CSP, are you considering CSP with storage capabilities? If not, please explain why not.

PacifiCorp Response:

CSP is not included as a resource option in the 2021 IRP. See the response to question five.

7. Regarding Navigant's Private Generation analysis, how much electricity is assumed to be exported (versus consumed on site) for a rooftop solar installation in Utah? How this figure was determined, does it vary by customer class, and how is it used to determine of simple payback?

PacifiCorp Response:

Guidehouse determines the energy consumed onsite vs. energy that is exported to the grid by subtracting the hourly solar generation from the hourly building load. If the solar generation for a specific hour is greater than the building load for that hour the balance is assumed to be compensated at the export rate. In Utah that is calculated at 90% of the offset rate as provided by PacifiCorp. In Utah ~51% of the solar energy generated for residential customers is exported to the grid and valued at the 90% export rate. For industrial the value is ~0% and ~44% for commercial.

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.