

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 [Click here to enter date.](#)

*Name: Rose Anderson

Title: Economist

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Address: [Click here to enter text.](#)

City: [Click here to enter text.](#) State: [Click here to enter text.](#) Zip: [Click here to enter text.](#)

Public Meeting Date comments address: 7/30/2019 Check here if not related to specific meeting

List additional organization attendees at cited meeting: [Click here to enter text.](#)

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

July Public Input Meeting

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.

Please see attached document with feedback.

Topic: Load Forecast

1. OPUC Staff finds that an opportunity to review the company's load forecast methodology before IRP portfolio analysis begins is essential to our thorough review of the 2021 IRP.

Would PacifiCorp please provide the most current data and equations used to forecast load for the 2021 IRP, including data and equations for both the peak demand forecast and the aggregate demand forecast?

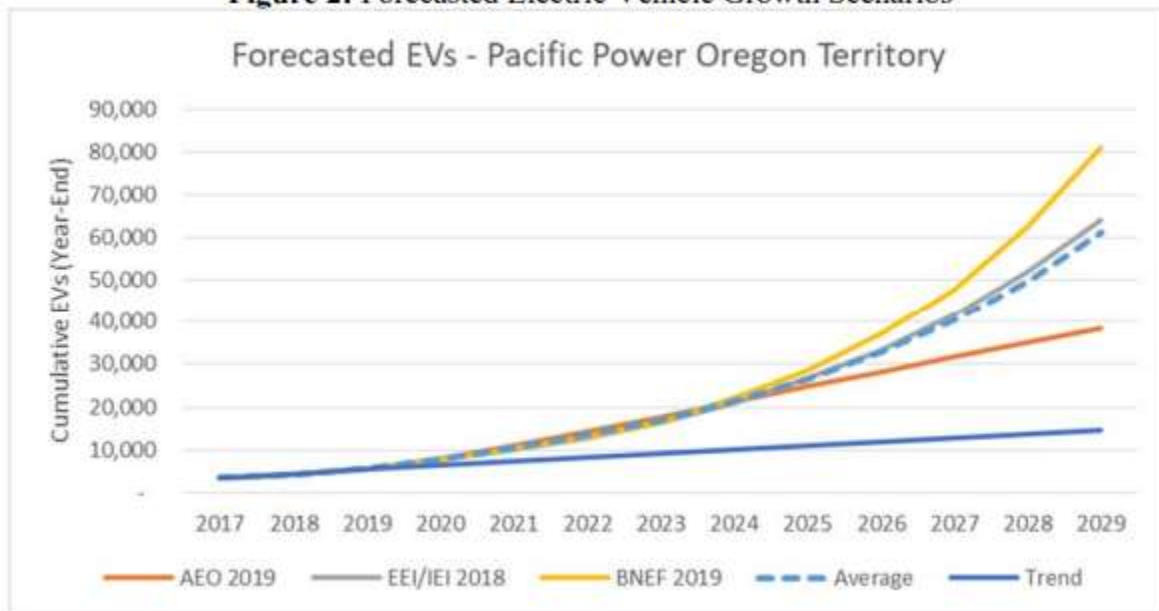
Staff requests preliminary data and equations to review now, as well as finalized data and equations once the load forecast is finalized.

2. Staff is interested in seeing load forecast sensitivities for low and high private generation in the 2021 IRP. Does the Company plan to include these sensitivities in the 2021 IRP? If so, please describe the analysis and explain what assumptions will be used.
3. Staff is interested in seeing load forecast sensitivities for low and high customer preference participation in the 2021 IRP.

* Required fields

- a. Does the Company plan to include these sensitivities in the 2021 IRP? If so, please describe the analysis and explain the assumptions that will be used.
 - b. Staff recommends that a high-customer-preference scenario should consider the possibility of multiple cities and counties joining customer preference programs. This analysis could be based on interest shown to PacifiCorp by cities and counties to-date. In this scenario, Staff suggests a reasonable assumption would be approximately 20% of PAC’s residential and commercial load covered under the high-customer-preference scenario.
4. How does the methodology of the 2021 IRP load forecast compare to the load forecast methodology in the UE 374 rate case? Please explain, including a comparison of the variables and equations used to create each forecast.
 5. Please provide a chart showing a comparison of the load forecast in the UE 374 rate case, the updated load forecast used in the 2020AS RFP, and the current load forecast for the 2021 IRP.
 6. The July IRP Public Input Meeting presentation explains that the load forecast increase in the 2021 IRP is driven by federal rollbacks, electric vehicles, and data centers. Please provide a description of the federal rollbacks considered, explain how they are included in the forecast, and provide more detail about how they are expected to increase load.
 7. In Figure 2 of PacifiCorp’s UM 2056 reply comments, the sources averaged to produce an EV growth rate grew faster than the EV adoption ‘trend’ in PacifiCorp’s Oregon service territory. What evidence suggests the EV growth rate in PacifiCorp’s Oregon service territory will become as high as an average of the AEO, EEI, and BNEF forecasts?

Figure 2: Forecasted Electric Vehicle Growth Scenarios



Topic: Distribution System Planning

8. In distribution system planning, does PacifiCorp allocate forecast load among points on the distribution system in a top down manner, or forecast load at each individual point on the distribution system? Please provide a brief explanation of how the distribution system load forecast is performed.

* Required fields

9. Does PacifiCorp plan to add additional SCADA technology to its distribution system? If so, please share an approximate timeline for these additions.

Topic: Supply Side Resources

10. Are any potential efficiencies of scale being missed by only looking at 100 MW and 200 MW solar installations? For example, has PacifiCorp considered to what extent a 400 MW solar installation would save on shared O&M or construction costs, as compared to building two separate 200 MW installations?
11. How will the operational and cost effects of the EIM be included in portfolio modeling? Please explain how the NPVRR and system operational benefits of participation in the EIM will be reflected in the 2021 IRP modeling. If the EIM will not be modeled, please explain why not.
12. For combined variable energy resource (VER) and storage resources, will Plexos be allowed to choose from a variety of options for the storage duration and nameplate capacity?

Staff encourages modeling a variety of options for storage duration and nameplate capacity in combined VER and storage projects. Staff recommends including at least one other option, based on the Company's best judgement of what would constitute another reasonable option.

For example: Plexos could be given the additional option to select combined VER and storage resources with 6 hour batteries that consist of 25% of nameplate renewable capacity.

13. Which Wyoming wind resource locations will be studied in the IRP? Where will the wind forecast data come from?
14. Please provide hourly solar profiles for any new solar resources under consideration in the IRP, by location, and include time zone information. Please also provide an explanation of whether the solar profiles are considered consistently across the two time zones in a way that makes sure they are not off by one hour due to time zone differences.
15. Will the Plexos model have more efficient processing than System Optimizer did? For example, will Plexos be able to consider more supply side and demand side options than System Optimizer for a given amount of model run time?
16. Staff is interested in the 2021 IRP providing more information about which hours have the highest costs on PAC's system. This type of study will help stakeholders understand the potential benefits of service options like demand response, storage, and TOU rates.

Staff requests that as a preliminary study, PacifiCorp provide marginal cost data in two formats:

- a. 8760 hour cost-duration curves organized from highest to lowest marginal generation cost (\$/MWh) for the PAC system, PAC-E, and PAC-W, consisting of actual data from the year 2019.
- b. The average marginal cost of energy on PAC's system, PAC-E, and PAC-W on a 12 x 24 grid, based on actual data from the year 2019.

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.

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* Required fields

Recommendations: Provide any additional recommendations if not included above - specificity is greatly appreciated.
Click here to enter text.

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

Thank you for participating.

* Required fields