## PacifiCorp - Stakeholder Feedback Form

# 2019 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 2019 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	12/6/2018	
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*Organization:	Individual Stakeholder					
Address:	PO Box 2945					
City:	Casper	State:	Wyoming	Zip:	82602	
Public Meeting Date comments address: Click here to enter date.					ated to specific meeting	
List additional organization attendees at cited meeting: Not many yet						
*IRP Topic(s) and/or Agenda Items: List the specific topics that are being addressed in your comments.  Demand growth, Conclusions from the IRA, Stacked Retirement cases, Need for base Capacity, Carbon Sequestration, Natural Gas Prices						
☐ Check here if any of the following information being submitted is copyrighted or confidential.						
☐ Check he	Check here if you do <b>not</b> want your Stakeholder feedback and accompanying materials posted to the IRP website.					

## **PacifiCorp Response:**

PacifiCorp regularly updates its load forecast for multiple load classes using historical data and inputs such as regional and national economic growth, weather, seasonality, and other customer usage and behavior changes. In PacifiCorp's 2017 Integrated Resource Plan (IRP) Update, published May 1, 2018, the compounded annual average growth rate (CAGR) was 0.54 percent. The 2019 IRP includes an updated forecast which has a CAGR of 0.83 percent. The 2019 IRP includes an updated forecast. For information regarding the development and analysis of PacifiCorp's load forecast, please refer to the load forecast discussion provided in PacifiCorp's public input meeting presentation from July 26-27, 2018 available at the following location: <a href="https://www.pacificorp.com/es/irp/pip.html">www.pacificorp.com/es/irp/pip.html</a>.

2. Conclusions from the Initial Reliability Assessment do not consider the reliability of Battery Storage or the potential environmental dangers and impacts thereof.

## **PacifiCorp Response:**

PacifiCorp's assumptions for energy storage resources are based on operational considerations from its 2018 Renewable Resources Assessment, available online under 2019 Integrated Resource Plan – Studies available at: <a href="https://www.pacificorp.com/es/irp/irpsupport.html">www.pacificorp.com/es/irp/irpsupport.html</a>.

<sup>\*</sup>Respondent Comment: Please provide your feedback for each IRP topic listed above.

<sup>1.</sup> It seems that Electrical Demand growth will continue to increase on an annual basis. What is the projected amount of Growth on an annual basis? Is is approximately 9%. Whatever the increase, has this been properly accounted for in the IRP?

<sup>\*</sup> Required fields

Some environmental issues and risks are discussed in the 2014 Energy Storage Screening Study produced by HDR for the 2015 IRP and in the Battery Energy Storage Study for the 2017 IRP produced by KEMA, Inc. The supply side resource table does not include environmental data related to batteries; therefore, there were no cost calculations related to environmental risks of batteries.

3. Stacked Retirement Cases: The Planned Retirements of the Coal Fired Power Plants are too closely bunched to allow and provide for adequate security for the Power Requirements of the Consumers.

## **PacifiCorp Response:**

The stacked retirement cases are aligned to the retirement schedule required by order of the Oregon Public Utility Commission (OPUC) relevant to docket LC 70. The studies do not describe an implementation plan, and a common year was selected for analysis to allow meaningful comparisons among the 40+ retirement studies. As discussed at PacifiCorp's December 3-4, 2018 public input meeting, additional unit-by-unit studies examine retirements in alternate years.

4. There is a need for Base Load Capacity for future power needs. Solar and Wind can not be relied upon at this time to allow then to be considered as Base Load Capacity.

## **PacifiCorp Response:**

The capacity contribution of all resources, including wind and solar resources, is studied and accounted for in the company's IRP modeling. Please refer to the company's Planning Reserve Margin & Capacity Contribution Results starting on page 81 of the September 27-28, 2018 public input meeting presentation, which is publicly available at <a href="https://www.pacificorp.com/es/irp/pip.html">www.pacificorp.com/es/irp/pip.html</a>.

5. Carbon Sequestration as provided by the Petra Nova Plant near Houston Texas has not been mentioned in the IRP and therefore has not adequately considered. Plants such as Petra Nova CAN Make COAL Fired Power Plants Environmentally Carbon Neutral. "Carbon Zero" Selected Plants in the Pacific Corp Portfolio can be Utilized for Enhanced Oil Recovery and other economically sound projects. The IRP must consider this alternative before it can be finalized.

## PacifiCorp Response:

Sequestration technologies are represented in the company's supply-side resource table, available under "November 1, 2018 – Supply-Side Resource Table" at <a href="www.pacificorp.com/es/irp/pip.html">www.pacificorp.com/es/irp/pip.html</a>. For a description of these technologies, please refer to Volume I, Chapter 6 page 119 of the 2017 IRP, available under "2017 Integrated Resource Plan – Volume I, Main" at <a href="www.pacificorp.com/es/irp.html">www.pacificorp.com/es/irp.html</a>.

6. Converting Power Plants from COAL to Natural Gas has Already caused the price of natural Gas to rise dramatically. While we have discovered vast deposits of Natural Gas recently, the Huge Volume of Natural Gas needed to run Power Plants will eventually drive Natural Gas Prices higher. Has this potential impact of HIGH Natural Gas prices been considered in the IRP? What will this mean for consumers?

#### **PacifiCorp Response:**

PacifiCorp regularly updates its market and commodity price forecasts and models multiple price-policy scenarios accounting for low, medium and high natural gas price futures. The 2019 IRP includes an updated natural gas price forecast. For information regarding the development and analysis of PacifiCorp's price forecasting, please refer to price policy scenarios section of PacifiCorp's public input meeting presentation from September 27-28, 2018 available at <a href="https://www.pacificorp.com/es/irp/pip.html">www.pacificorp.com/es/irp/pip.html</a>. Also refer to PacifiCorp's 2017 IRP, specifically Volume II, Appendix A, Load forecast Details. The 2017 IRP and 2017 IRP Update are publicly available at <a href="https://www.pacificorp.com/es/irp.html">www.pacificorp.com/es/irp.html</a>.

**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.

Click here to enter text.

**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 <a href="IRP@Pacificorp.com">IRP@Pacificorp.com</a>

Thank you for participating.