## 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    | 12/7/2018                |  |
|--|--|---------------------|-------|---------------|----------------------|--------------------------|--|
| *Nam   | e: Steve Hughes  |                     |       | Title:        | Click here to ente   | er text.                 |  |
| *E-ma  | l: H3energyllc@gmail.com   |                     |       | Phone:        | 307-258-1379         |                          |  |
| *Organizatio   | n: Individual Stakeholder  |                     |       |               |                      |                          |  |
| Addres   | s: 132 N. Park St.   |                     |       |               |                      |                          |  |
| Cit  | y: Casper  | State:              | WY    |               | Zip:                 | 82601                    |  |
| Public N   | Meeting Date comments address:   | Click here to enter | date. | $\boxtimes C$ | heck here if not rel | ated to specific meeting |  |
| List additional organization attendees at cited meeting: None at this time                             |  |                     |       |               |                      |                          |  |
|  |  |                     |       |               |                      |                          |  |
| *IRP Topic(s) and/or Agenda Items: List the specific topics that are being addressed in your comments. |  |                     |       |               |                      |                          |  |
| Wind and solar energy, CO2 policies and Natural Gas assumptions  |  |                     |       |               |                      |                          |  |
|  |  |                     |       |               |                      |                          |  |
| ☐ Check  | Check here if any of the following information being submitted is copyrighted or confidential.                       |                     |       |               |                      |                          |  |
|  |  |                     |       |               |                      |                          |  |
|  | Check here if you do <b>not</b> want your Stakeholder feedback and accompanying materials posted to the IRP website. |                     |       |               |                      |                          |  |
| ,, <b>c</b> osi  |  |                     |       |               |                      |                          |  |

1. Comments solicited and received by PacifiCorp from "other" stakeholders seem to indicate that significant work has been done relative to a conversion to wind and/or solar energy as possible scenarios being considered. In this regard, however, there was no mention of work being done or considered relative to CO2 sequestration/utilization. Further, there seemed to be no discussion of any attempts to explore any mutual benefit to PacifiCorp, communities or the coal industry and associated jobs through beneficial use of CO2 sequestration/utilization. Have we missed an element of the IRP that is considering CO2 use? Or is there another IRP or public documentation that deals with CO2 sequestartion and beneficial use?

### **PacifiCorp Response:**

Sequestration technologies are represented in PacifiCorp's supply-side resource table, available under "November 1, 2018 – Supply-Side Resource Table" at <a href="https://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 Integrated Resource Plan (IRP), available under "2017 Integrated Resource Plan – Volume I, Main" at <a href="https://www.pacificorp.com/es/irp.html">www.pacificorp.com/es/irp.html</a>.

2. With the potential use of wind or solar power, what work has been done by PacifiCorp to examine or mitigate the potential environmental hazards of large scale Battery use as it relates to energy storage? A second part to this question would be: How would this effect the overall cost picture to end users or to PacifiCorp?

#### **PacifiCorp Response:**

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

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 at www.pacificorp.com/es/irp/irpsupport.html.

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) What forecasting has been done relative to the potential decreasing availability and rising costs of Natural Gas?

### **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 will included an updated natural gas price forecast. For information regarding the development and analysis of PacifiCorp's price forecasting, please refer to PacifiCorp's 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 IRP@Pacificorp.com

Thank you for participating.