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 10/16/2020

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Public Meeting Date comments address: **8/28/2020** ☐ 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.
August CPA Presentation

☐ 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. Other utilities in Oregon, California, and even Oklahoma have been using connected thermostats with central cooling and heating DR programs, capturing both energy efficiency and DR savings from this increasingly common household and business appliance. DLC Smart thermostats were among the most cost-effective demand response technologies, with the most technical potential in Oregon in the 2019 CPA. Can PAC share why such programs have not been proposed as pilots, especially in PACW given PACs reliance on FOTs as a capacity product? Are there any constraints PAC is facing that inhibit the company from researching and proposing pilot DSM offerings using this well-established technology?

   PacifiCorp Response:
   DLC DR programs in PACW have not been identified as cost-effective resources for our customers through our long-term planning process until 2029. The company operates over 400 MW of DR in Rocky Mountain Power today as cost-effective resource and continues to update planning models with the best known information about the costs and performance of these resources. When resources are determined to be cost-effective for the system and our customers the company will pursue them. PacifiCorp is planning to issue an RFP for DR in Oregon and Washington in January 2021 to determine if there are cost effective program options to acquire in the near term.

2. In order to help states understand their CPA results, it would be helpful to see a table of cumulative potential, by end use, by state, by sector (residential/commercial/industrial.)

* Required fields

PacifiCorp Response:
This breakdown of detail will be provided and posted to the website for all states except Oregon where Energy Trust of Oregon performs the potential assessment and provides bundles of resources to the PacifiCorp IRP model.

3. Staff recommends that in the future the diagram on page 5 should include levelized costs as an output and include the 'bundling' step before the costs are input into the IRP models.

   PacifiCorp Response:
   We will take this suggestion into consideration for future presentations.

4. Does the Oregon CPA analysis take into account rapidly rising building code, per Executive Order 20-04?

   PacifiCorp Response:
   As Executive Order 20-04 was effective in spring 2020 and the Commission is currently developing its draft work plans to address the Executive Order, the potential impacts have not been included for the 2021 IRP CPA.

5. Why was the "large project adder" removed from the projection for OR (pg. 33)?

   PacifiCorp Response:
   The large project adder methodology used in the last CPA cycle was not used for this cycle due to the inclusion of specific custom large project savings in the short term targets complicating the concept of creating an average placeholder for potential yet unspecified future opportunities. The CPA is designed to be a long term representation of typical savings opportunities. Custom, large opportunities are not well represented in the study process but will continue to be considered within short term program planning opportunities in addition to IRP resource selections.

6. Please provide the reasoning for using a 5 year amortization period for demand response? See Page 48 of August presentation. Please include answers to the following:

   a. In what way does the 5-year amortization period align with current procurement practices?

      PacifiCorp Response:
      The five-year amortization period aligns with current procurement practices as five years is considered to be a reasonable length of time to ramp demand response programs yet minimize risk of technical obsolescence.

   b. Is any DR infrastructure expected to be used and useful to PacifiCorp after five years?

      PacifiCorp Response:
      Five years is a reasonable estimate for the useful life of rapidly advancing technologies and also aligns with the assumptions for contracting.

   c. Is the DRMS cost amortized over five years, and if so is that amortization timeframe consistent with the expected lifetime of that equipment? If it's not consistent with the lifetime of that equipment, please explain why its use is acceptable for those costs.

      PacifiCorp Response:
      For modeling considerations, fixed set up costs that may be incurred in early years are spread over the life of the contract. DRMS costs are assumed to be for vendor supplied software and platforms enabling utility control of the end use devices.

7. Please provide an explanation of why Pacific Power states will use the TRC test for demand response, while Rocky Mountain Power states use the UCT? (See page 48.)

PacifiCorp Response:
The assumption to use TRC for Pacific Power states and UCT for Rocky Mountain Power states is aligned with state guidance for energy efficiency benefit/cost tests.

8. Please list and describe each of the inputs from the CPA that will go into the PLEXOS model for:
   a. Efficiency resources, and

      PacifiCorp Response:
      Technical achievable measures from the CPA will be grouped into bundles as determined through the ongoing energy efficiency bundling analysis process for each state and are then provided as an input to IRP modeling. Measure bundles are characterized as 20 years of hourly savings impacts in megawatt. Each bundle is assigned a levelized cost.

   b. Demand response resources

      PacifiCorp Response:
      Technical achievable demand response measures from the CPA are expected to be grouped into state-specific program bundles as described on slide 28 of the October 22, 2020, public input meeting presentation. As Plexos is a new model, we are still determining how the available demand impacts and grid services of DR measures will be input to the model.

9. Will there be a 'participant cost' for customer-sited battery energy storage demand response? (See page 45.) If so, please provide the cost that will be used and the reasoning for selecting it.

   PacifiCorp Response:
   The customer sited battery energy storage measure will be modeled as "bring your own battery" program and so no participation costs will be assumed.

10. Will PacifiCorp model the use of customer-sited storage devices including batteries and water heaters to increase load to absorb excess RE generation as an alternative to curtailment of RE generation?

    PacifiCorp Response:
    The model is not designed to specifically link distributed storage dispatch with renewable generation.

11. Slide 49 says in previous studies some costs have been shared across states. Will that cost sharing occur in the 2021 CPA? Why or why not?

    PacifiCorp Response:
    Costs that will be shared are administrative support costs where, for example the same FTE is able to manage the same program across multiple states.

12. DRMS costs haven't been included in the CPA in the past (Slide 49.) Will they be included in the 2021 CPA? Why or why not?

    PacifiCorp Response:
    DRMS costs specific to each DR program will be included as ongoing O&M costs as the study assumes that DRMS is a vendor supplied solution to integration of dispatch of the specific resource. Utility wide investments in a system side DERMs solutions will not be included as the company has no definitive plans to invest in such a system at this time.

13. The August presentation says on slide 61 that "The assumption in RMP states is that potential for central cooling and heating would be captured through switches, not connected thermostats." Please provide more description of 'switches' and how they differ from connected thermostats.

    PacifiCorp Response:

* Required fields

The Coolkeeper program in Utah controls residential and small commercial central air conditioners through switches installed on each unit. The incremental cost to add new participants by installing switches on their equipment is low and therefore the most cost-effective approach for this market segment for RMP is to continue adding switches to air conditioners and potentially heat pumps going forward versus expanding to a new control approach over wi-fi for smart connected thermostats.

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.

* Required fields