

# 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 9/4/2020

\*Name: Jim Woodward

Title: **Regulatory Analyst**

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\*Organization: WA Utilities & Transportation Commission (WA-UTC)

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: **8/28/2020**

Check here if not related to specific meeting

List additional organization attendees at cited meeting:

**Nikita Bankoti**

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

Conservation potential assessment (CPA) 8/28 workshop relevant topics.

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 accompanying WA-UTC staff feedback & questions document.

### **Commission Staff Feedback for PacifiCorp 2021 IRP: CPA Workshop (August 28, 2020)**

This feedback, dated September 4, 2020, states the informal comments, questions, and recommendations of Washington Utilities and Transportation Commission Staff, Jim Woodward and Nikita Bankoti. Staff appreciates the continued work of PacifiCorp's IRP / CPA Team and the opportunity to participate. Timely feedback is offered as technical assistance and is not intended as legal advice. Staff reserves the right to amend these opinions should circumstances change or additional information be brought to our attention. Staff opinions are not binding on the commission.

This staff feedback document is follow up to PacifiCorp's Conservation Potential Assessment (CPA) Workshop facilitated on August 28.

Company response by **September 25, 2020**, is appreciated for select questions and requests in **BOLD**.

\* Required fields

## CPA Workshop (8/28/20) – Presentation questions

1. Incorporating NWPCC 2021 Plan assumptions (slide 7) – Staff commend Pac & AEG team for aligning 2021 CPA ramp rates with draft 2021 Power Plan draft final supply curves.
2. Key changes relative to 2019 CPA (slide 9) – Forecasting methodology
  - a. Re: lighting savings methods (EISA) – Staff indicated Market research conducted by NEEA suggested with rollback of EISA 2020 45 lumen/W backstop provision, select vendors were going to ignore higher efficiency state laws, if markets governed were relatively small (e.g., WA).
  - b. **Staff propose Pac & AEG conduct a sensitivity analysis to consider potential impacts of vendors following the Federal rollback and ignoring more stringent state efficiency standards.**

### **PacifiCorp Response:**

PacifiCorp has scoped this Conservation Potential Assessment (CPA) to follow best practices for consideration of codes and standards which is to assume compliance or market practice, whichever is most efficient, as baseline energy consumption. This is in line with how the Regional Technical Forum and Power Council incorporate impacts of new codes of standards to baseline calculations. A sensitivity analysis would be an expansion of the study, requiring additional time and budget to complete.

3. State specific adjustments (slide 10) – RTF UES measures consider climate change (CC) effects. During 8/28 workshop:
  - a. Pac & AEG acknowledged CPA draft savings measures do not consider CC.
  - b. NWPCC (POC: T. Jayaweera) offered to assist Pac & AEG team incorporate CC considerations into CPA.
  - c. **Staff strongly encourage Pac & AEG to incorporate CC considerations into CPA savings estimates and encourage the company team to accept NWPCC’s offer of assistance.** Staff are also happy to facilitate conversations between Pac / AEG and NWPCC staff re: this matter, if helpful.

### **PacifiCorp Response:**

PacifiCorp is in the process of evaluating a possible climate change sensitivity to incorporate into the 2021 Integrated Resource Plan (IRP). Impacts to energy efficiency (EE) resources would be one of several planning factors considered. As encouraged, we are in coordination with Northwest Power and Conservation Council (NWPCC) regarding how weather dependent measure savings may be impacted by climate change.

4. Incentive cost analysis (slide 18) – Staff seek clarification whether this **analysis is being performed for the first time in the CPA process with respect to WA?** Second bullet point is confusing – “Affects UT and ID, which utilize the UCT as the primary cost-effectiveness criterion, rather than TRC.”

### **PacifiCorp Response:**

This incentive cost analysis is just informative for states where the Total Resource Cost Test (TRC) is the main cost effectiveness test and has not been provided in the past. For those states using the TRC, it is not utilized in the analysis. States which use the Utility Cost Test (UCT) as the primary test would look to this analysis being used to inform a large portion of the program cost assumption, in addition to program administration costs.

5. 2021 CPA draft results – Technical achievable potential comparison (slide 25)
  - a. From 2021-2030, **what major factors are contributing to the increase in technical achievable potential, and what factors are contributing to decline post 2030?**

### **PacifiCorp Response:**

The increase in savings to 2030 is due to extended ramp rates pushing savings out into the future, the impact of which is exacerbated by the reduction in lighting savings in the near term compared to previous CPAs. This trend is similar to the NWPCC 2021 Power Plan inputs (Slide 26).

- b. If the decrease in potential from year 2030 onwards is a result of measure “saturation” within the residential lighting space, **what are company’s plans to diversify the energy-savings opportunities?**

**PacifiCorp Response:**

Non-lighting savings in the CPA will inform program planning to diversify programs which occurs outside of the CPA/IRP process in annual and biennial filings.

6. 2021 CPA draft results – Residential, commercial, industrial (slides 27 – 29)
  - a. Staff asks for Pac & AEG to **develop stacked or side-by-side charts for easier comparison of savings across sectors (i.e., residential, commercial, industrial).**

**PacifiCorp Response:**

Please see the file “2021 Conservation Potential Assessment Draft Energy Efficiency Measure Results”, worksheet “Savings by sector and state” posted to the IRP website for additional plots displaying the results and the data used in plots. <https://www.pacificorp.com/energy/integrated-resource-plan/support.html>.

7. Transition to grid services view of DR (slide 43)
  - a. Staff commend Pac & AEG assessing “DR’s ability to provide value through events beyond peak shaving to align DR’s capabilities with PacifiCorp’s potential use cases.”
  - b. To further assist the company investigate secondary DR benefits (e.g., flexibility ramping, ancillary services), **staff once again urge company to review [WA-UTC demand response \(DR\) staff workshop Jun 20 presentation](#)** (IRP rulemaking docket [UE-190698](#)) for additional guidance & suggestions on how to holistically consider DERs in 2021 IRP / CPA.

**PacifiCorp Response:**

PacifiCorp attended the June 20 workshop and has reviewed the workshop materials. Exactly how the new IRP model considers and therefore values the range of demand response (DR) capabilities when dispatched within the system is currently in review.

8. Battery energy storage for demand response (slide 45)
  - a. During 8/28 CPA workshop, Pac & AEG indicated battery storage assessments were new for the 2021 CPA and are seeking additional inputs, resources, and/or studies.
  - b. As a resource, **staff call company’s attention to DOE-PNNL storage study** that staff referenced as part of PIM #1 feedback (*reproduced below*):
  - c. **Staff recommends Pac compare data for storage alternatives, including PNNL’s Energy Storage Technology and Cost Characterization Report (July 2019):**  
[https://www.energy.gov/sites/prod/files/2019/07/f65/Storage%20Cost%20and%20Performance%20Characterization%20Report\\_Final.pdf](https://www.energy.gov/sites/prod/files/2019/07/f65/Storage%20Cost%20and%20Performance%20Characterization%20Report_Final.pdf).

This report defines and evaluates cost and performance parameters of six battery energy storage technologies (BESS) (lithium-ion batteries, lead-acid batteries, redox flow batteries, sodium-sulfur batteries, sodium metal halide batteries, and zinc-hybrid cathode batteries) and four non-BESS storage technologies (pumped storage hydropower, flywheels, compressed air energy storage, and ultracapacitors). Data for combustion turbines are also presented. Detailed cost and performance estimates were presented for 2018 and projected out to 2025.

**PacifiCorp Response:**

Thank you for the resource suggestion.

9. Process for developing DR potential (slide 46) – **Does the model picking DR resources run hourly and chronologically?**

**PacifiCorp Response:**

Slide 46 shows how much energy consumption is occurring every hour of the year by end use. The capacity expansion component of the IRP model considers all time periods simultaneously, making intertemporal resource selections, and is therefore superior to a chronological consideration. While many IRP inputs are hourly and provide shapes with hourly considerations included, IRP modeling cannot efficiently resolve 20 years of hourly optimization; instead IRP modeling considers sample days or weeks and uses characteristic modeling. For the 2021 IRP, the expectations to use a representative selection of sample days, determined by the model, each of which will be hourly. The number of sample days has not yet been determined.

10. DR potential process cont. (slide 47) - Within Step 2, **how are Pac & AEG accounting for interactive effects between DR and energy efficiency (EE)?**

**PacifiCorp Response:**

The primary way the interaction between DR and EE is addressed is by first determining the energy efficiency forecast of potential and then using that forecast to forecast DR-enabled equipment.

11. Developing DR resource costs (slide 48)

- a. **Will non-energy values (i.e., quantification of impacts) of DR be included in the potential cost assessment?**

**PacifiCorp Response:**

Consistent with the NWPCC representation of DR for the 2021 IRP and input from the Brattle Group as noted from the June 20 workshop, participant value of service lost is included in the cost assessment.

- b. **As part of incremental cost, will the IRP have an:**
- i. Estimate of the **number of hours per season and time of day,**
  - ii. Estimate of the **duration of need within the day,** and
  - iii. **Description of the set of conditions that create the given need?**

**PacifiCorp Response:**

For representation of the levelized cost of DR resources, there are a number of approaches that can be applied, each will apply a different assumption for available demand (denominator) in the calculation depending on use case being characterized. The CPA is producing available demand for each measure by each hour of the year and the duration of availability when called. The model can represent the resource availability and operating constraints for all hours of the year.

**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.

NA

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**Recommendations:** Provide any additional recommendations if not included above - specificity is greatly appreciated. Please see accompanying WA-UTC staff feedback & questions document.

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\* Required fields

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Please submit your completed Stakeholder Feedback Form via email to [IRP@PacifiCorp.com](mailto:IRP@PacifiCorp.com)

Thank you for participating.

\* Required fields