

# 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 7/28/2018

\*Name: Kevin Emerson  
Director

Title: Energy Efficiency Program

\*E-mail: [kevin@utahcleanenergy.org](mailto:kevin@utahcleanenergy.org)

Phone: 801-903-2029

\*Organization: Utah Clean Energy

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: 7/23/2018  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.  
Flexible Reserve Study

---

Check here if any of the following information being submitted is copyrighted or confidential.

---

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

How does AEG weight the UEC baseline to represent varying levels of energy efficiency among the measures included in the measure saturation data? For example, for the central AC measure what is the assumed percentage of central ACs that are highly efficient, meet the current federal minimum standards, or are older units that are less efficient than the current federal standards?

### **PacifiCorp Response:**

Base-Year Equipment Consumption: When developing base-year market profiles, calibrated profiles of energy consumption tied to weather-normalized sales from a recent year, AEG uses the average installed efficiency in existing homes. PacifiCorp used an assumption of average installed efficiency of SEER 12 with retrofit measures applied to this baseline. Once the baseline is projected into the future, these inefficient units migrate towards average, standard-compliant, purchase shares as described in the response to the subsequent question, slowly improving the average unit efficiency.

On the July 23rd webinar AEG stated that they assume that measures are replaced annually based on the lifetime of the measure. In the example they provided, central ACs have an average life of 15 years, so they assume that 1/15 of the central ACs in operation will be replaced each year. When equipment of any type is replaced in AEG's modeling, what level of energy efficiency is assumed for the replacement measure? Does the

\* Required fields

---

AEG model assume that replacement measures meet the federal minimum standard or the most efficient model available?

---

This information will help us understand how the baseline study and measure list, etc. inform the development of the technical potential.

**PacifiCorp Response:**

Unit Turnover: AEG captures unit turnover utilizing vintage stock data rather than a simple inverse of lifetime (annual turnover = lifetime-1). As the model steps through the forecast period, older equipment is retired and presented with a “Lost Opportunity” purchasing decision. Using PacifiCorp’s baseline study, which typically reports equipment age in 5 to 6-year bins, AEG is able to vary this distribution over time. On average, this will result in 1/15th of the central ACs being replaced, but implies that a different number of units may turn over in any given year.

Replacement Efficiency: AEG assumes that a distribution of both standard equipment as well as efficient options are purchased within the baseline projection, based on a combination of the EIA’s Annual Energy Outlook and recent-year ENERGY STAR shipment data. During this process, off-market equipment units will be replaced with compliant ones. Consistent with Seventh Power Plan methodology, these decisions are “frozen” over time, so additional naturally occurring efficiency is excluded from the baseline and eligible for potential. The only time an exception exists is when a new federal standard comes online.

---

**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.](#)

- Check here if you do **not** want your Stakeholder feedback and accompanying materials posted to the IRP website.

Thank you for participating.