

PSE IRP Consultation Update

Webinar 6: Portfolio Sensitivities

August 11, 2020

09/01/2020

The following consultation update is the result of stakeholder suggestions gathered through the IRP online Feedback Form, collected between August 4 through August 18 and summarized in the August 25, 2020 Feedback Report. The report themes have been summarized along with responses to the suggestions that have been implemented. If a suggestion was not implemented, the reason is provided.

PSE thanks Kyle Frankiewich (WUTC Staff) for follow-up discussions concerning his questions on August 27, 2020.

PSE thanks Katie Ware (Renewable Northwest) for being available for a clarification call concerning her suggestion for a sensitivity; a call will be arranged well before the October 20 IRP Meeting.

Certain responses were not included in the August 25, 2020 Feedback Report. Those questions have been addressed in the Webinar 6 Feedback Form Addendum, also dated and uploaded to pse.com on September 1, 2020.

Feedback Report Addendum

The feedback received from Kyle Frankiewich (WUTC Staff) regarding non-energy benefits on slide 21, questions regarding slide 54, and questions on slides 57-58 on distributed solar and batteries was not answered in the Feedback Report posted on August 25, so an addendum to answer the questions has been posted.

Summary of Stakeholder Feedback on Portfolio Sensitivities

PSE appreciates the feedback provided by stakeholders. In summary, the following list of sensitivities has been added to the list:

Portfolio sensitivities added during the August 11 webinar:

1. Social cost of carbon only (as a planning adder), no CETA renewable requirement
2. Social cost of carbon only (as a dispatch cost), no CETA renewable requirement
3. Add 185 MW to MT transmission from Colstrip transmission line
4. Fuel switching from electric to gas
5. High economic conditions with SCC as a dispatch cost in the portfolio model only
6. Electric vehicle battery to grid available as a distributed energy resource
7. Time of use pricing for conservation and demand response
8. Wholistic conservation approach

Portfolio sensitivities added from the feedback report for the August 11 webinar:

9. Municipal bans on new natural gas
10. Refinements to resource cost assumptions
11. Private solar input testing
12. Equity focused portfolio
13. 2% Cost threshold
14. 2% Cost threshold - Must take DR and Battery storage first, then optimize other builds
15. 2% Cost threshold - Renewable Overgeneration Test
16. Virtual Power Plants (VPP)
17. Hydrogen as an alternative fuel for NG plants

Notes received from stakeholders regarding sensitivities already on the list:

Sensitivity #22 - Mid economic conditions with SCC as a fixed cost plus a federal CO2 tax
Virginia Lohr suggested to use a higher cost than \$15, more consistent with proposed federal legislation

Sensitivity #31 - Temperature sensitivity on load
Don Marsh suggested to use most recent 10-15 years of temperature data to capture recent trends

PSE will make best efforts to complete as many portfolio sensitivities as possible for the 2021 IRP. However, given that the list has over 50 different portfolio sensitivities, PSE will ask stakeholders to prioritize the list. PSE will begin with the analysis with portfolios 1-3 (Mid, Low, and High economic conditions). The draft portfolios will be presented at the October 14 meeting for natural gas and the October 20 meeting for electricity. Once the stakeholders have an opportunity to view the draft results, PSE will re-evaluate the list of sensitivities with the stakeholders, then prioritize list of portfolio sensitivities.

PSE is committed to keeping our stakeholders informed of our progress toward incorporating feedback into the 2021 IRP process.

Update on the Electric Price Forecast - follow-up from June 10 Webinar as referenced in the August 11 Webinar 6 and related updates

On June 10, 2020, PSE presented the draft electric price forecast and incorporated stakeholder feedback regarding the electric price forecast.

1. Regional Demand Forecast

PSE received feedback from James Adcock, Kathi Scanlan (WUTC Staff), and Joni Bosh and Fred Heutte (NWECC), concerning PSE’s use of the Northwest Power and Conservation Council’s (the Council) 7th Power Plan regional demand forecast.

PSE response: PSE contacted the Council and included the demand forecast from the 2019 Policy Update to the 2018 Wholesale Electricity Forecast, which is the latest available demand forecast.

2. Washington Renewable Need

PSE received feedback from Vlad Gutman-Britten (Climate Solutions) and James Adcock regarding the starting point for the renewable ramp used for meeting the Washington state CETA requirements.

PSE response: PSE updated the Washington renewable need for the updated demand forecast and started the ramp in 2022.

3. Natural Gas Price Forecast

PSE received feedback from Kathi Scanlan (WUTC Staff), requesting the use of an updated gas price forecast to reflect the socioeconomic changes of the COVID-19 pandemic.

PSE response: PSE updated to the most recent natural gas price forecast from Wood Mackenzie.

The final electric price forecast was presented at the August 21 webinar as an update for stakeholders. James Adcock requested to see the updated Washington renewable need chart used for the electric price forecast during the webinar. PSE replied that it will be included in the constulation update for the webinar. The chart below is the renewable need for Washington state (MWh).

