

Meeting Summary

Integrated Resource Plan (IRP) Webinar on Final Gas Portfolio Results

Meeting Information

- Tuesday, March 14 from 1 p.m. - 4 p.m.
- Virtual webinar hosted by PSE, facilitated by Triangle Associates
- Links to:
 - [Meeting materials](#) (e.g. hot sheet and presentations)
 - [Meeting recording](#)

Meeting Summary

Welcome and Feedback Update

This information is on [slides 7-9](#) of the presentation.

Sophie Glass, Facilitator, Triangle Associates, opened the meeting by welcoming attendees, sharing a safety moment, and reviewing the agenda.

Phillip Popoff, Director of Resource Planning and Analytics, PSE, thanked interested parties for their participation in the IRP process and the feedback that helped shape PSE's 2023 Electric Progress Report and Gas Utility IRP.

Josh Jacobs, Vice President of Clean Energy Strategy, PSE, thanked interested parties for their continued engagement with PSE and provided an overview of feedback themes incorporated into the resource plans including:

- Electric Progress Report: Concerns about the inclusion of nuclear in the portfolio, process improvements, and concerns about meeting our CETA commitments.
- Gas Utility: Availability of biodiesel and green hydrogen as fuel sources, gas growth projections and the impacts of electrification, and the impacts of the Climate Commitment Act (CCA).

Josh noted that both the electric and gas utility preferred portfolios were revised as a result of public feedback. He closed by thanking attendees for their continued engagement in a planning process that spanned more than a year.

With regard to the gas utility, Phillip noted that PSE is committed to achieving our aspirational goal to reduce emissions by at least 30percent by 2030, but acknowledged the CCA, by itself, does not achieve that. He explained that the role of the IRP is to identify the lowest reasonable cost plan given the policies that exist today.

Gas Utility IRP Feedback

This information is on [slides 7-9](#) of the presentation.

Gurvinder Singh, Consulting Energy and Resource Planning Analyst, PSE, reviewed interested party feedback themes leading up to the draft gas preferred portfolio:

- Incorporating climate change data
- Evaluating alternative fuels including green hydrogen and renewable natural gas
- Incorporating Inflation Reduction Act (IRA) in the gas portfolio to the extent possible
- Conducting electrification analysis to understand emission reduction and cost effectiveness in the current system network
- Examining no-growth scenarios for gas demand in light of policy changes that will restrict gas growth in the region
- Examining State Energy Strategy (SES) as an additional scenario during modeling

Gurvinder reviewed interested party feedback themes from the draft Gas Utility IRP:

- Incorporating CCA and emissions reductions
- Incorporating zero-growth demand scenario in the preferred portfolio

- Evaluating electrification and addressed decarbonization concerns
- Evaluating alternative fuels

Gas Final Preferred Portfolio

This information is on [slides 10-16](#) of the presentation

The final gas portfolio contains the following changes based on interested party feedback:

- Updated price forecasts to align with the Department of Ecology's (DOE) final rule with lower prices
- Updated to zero gas growth portfolio and mid-CCA price
- Fewer renewed pipeline contracts and less renewable natural gas (RNG)
- Green hydrogen blended with the gas system. The IRA will make this a cost-effective resource starting in 2028
- Reduced reliance on CCA allowances

PSE plans to address uncertainties on CCA allowances after the Washington Utilities and Transportation Commission (Commission) rulemaking process.

Next steps for PSE and future IRP planning:

- Understand how federal and state subsidies will affect electrification
- Incorporate additional information on no-cost allowance revenue uses
- Understand how changes in customer bills affect customer behavior

Gurvinder presented the Gas Utility Action Plan in the intermediate (2024-2029) and long-term (2030-2045).

Electric Progress Report Feedback

This information is on [slides 18-21](#) of the presentation

Elizabeth Hossner, Manager of Resource Planning and Analysis, PSE, reviewed interested party feedback themes leading up to the Electric Progress Report draft:

- Reducing market reliance for peak reduction
- Incorporating climate change data with base demand forecast
- Remodeling generic resource and considering alternative fuels and emerging technologies
- Modeling battery cycling at various frequencies, capacities, and types
- Modeling hybrid renewables and diverse energy storage resources
- Incorporating IRA in modeling
- Embedding equity through analysis of customer benefit indicator metrics

Elizabeth review interested party feedback themes from the draft Electric Progress Report portfolio:

- Green hydrogen availability
- Biodiesel availability
- Advanced nuclear (SMR) exclusion
- Clean Energy Transformation Act (CETA) compliance concerns

Elizabeth addressed concerns around hydrogen fuel availability, noting that PSE would not build hydrogen peakers if the supply is unavailable. She explained the peakers are intended to be dual-fuel units, with biodiesel providing backup reliability. .

Electric Final Preferred Portfolio

This information can be found on [slides 22-29](#) of the presentation

Elizabeth provided an update on the total resource additions for 2025, 2030 and 2045 for Demand Side Resources, Distributed Energy Resources, and Supply Side Resources.

The preferred portfolio includes:

- Eliminating coal-fired resources
- Incorporating CEIP targets
- Acquiring conservation targets and pursue demand response
- Reduce market reliance at peak by adding diverse, available resources
- Expand transmission capacity
- Reduce existing resources due to contract expirations
- Explore emerging options to achieve 100% renewable energy by 2045

Other elements of the preferred portfolio include:

- 80 percent of retail sales supplied with renewable and non-emitting energy, meeting the CETA requirement in 2030
- Installing nameplate capacity new resources totaling 6,717 MW based on summer and winter peak capacity

PSE's Electric Action Plan includes:

- Expanding regional transmission capacity
- Studying biodiesel availability and firm acquisition
- Participating in hydrogen research and development
- Studying advancing nuclear and other emerging technologies
- Expanding distributed energy resources and demand response
- Acquiring energy efficiency
- Researching and deploying energy storage

Next Steps

This information is on [slides 30-31](#) of the presentation

Sophie shared the next step for the Gas Utility IRP and Electric Progress Report, which is to submit both documents to the Commission on March 31, 2023.

Phillip closed the meeting with a final thank you and expressed commitment to continued improvements in the planning process in future cycles.

Attendees (alphabetical by first name)

1. Abhishek Dave
2. Alicia Robinson
3. Alondra Regalado
4. Amy Wheelless
5. Andres Alvarez
6. Ayla Pavelka
7. Bill Pascoe
8. Bill Will
9. Byron Harmon
10. Charlee Thompson
11. Chris Searcy
12. Christine Bunch
13. Court Olson
14. Daniel Catchpole
15. Daniel Handal
16. David Tomlinson
17. Don Marsh
18. Elyse Hammerly
19. Fred Heutte
20. Hubert Liu
21. James Adcock
22. JD Hammerly
23. Jennifer Snyder
24. Jenny De Boer
25. Jim Dennison
26. Jim Schretter
27. Joel Nightingale
28. Jorge Sanz
29. Justin Kotwicki
30. Kate Brouns
31. Kim DeSante
32. Maggie Voigt
33. Mark Klein
34. Markus Virta
35. Matthew Doyle
36. Megan Larkin
37. Megan Partridge
38. Nelli Doroshkin
39. Patrick Leslie
40. Pete Stoppani
41. Rachel Clark
42. Stacy Vynne
McKinstry
43. Stephanie Chase
44. Subramanian
Vadari
45. Susan Christensen
Wimer
46. Taylor Nickel
47. Virginia Lohr
48. Willard Westre

Puget Sound Energy Staff Observers (alphabetical by first name)

1. Abhimanyu
Daschoudhury
2. Alexandra Karpoff
3. Angela Nwude
4. Anthony O'Rourke
5. Bala Dodoye-Alali
6. Bob Williams
7. Cindy Vu
8. Corey Corbett
9. Daihong Chen
10. David Meyer
11. Doug Hart
12. Elizabeth Hossner
13. Garret LaBove
14. Hannah Wahl PSE
15. Jack Wellman
16. Jennifer Magat
17. Jens Nedrud
18. Jesse Durst
19. Jisong Wu
20. Josh Jacobs
21. Kasey Curtis
22. Kelly Xu
23. Leslie Almond
24. Lorin Molander
25. Mark Lenssen
26. Matt Larson
27. Meredith Mathis
28. Michelle W.
29. Nathan Critchfield
30. Nick Gemperle
31. Phillip Popoff
32. Ray Outlaw
33. Renchang Dai
34. Roxana Vilchis
35. Sachi Begur
36. Stephanie Price
37. Steve Schueneman
38. Talysa McCall
39. Tyler Tobin
40. Virginia Winslow
41. Wendy Gerlitz
42. Zeia Lomax

Consultant Staff (alphabetical by first name)

1. Claire Moerder,
MFA
2. Claire Wendle,
Triangle Associates
3. Kim Zamora
Delgado, Triangle
Associates
4. Seth Baker, MFA
5. Sophie Glass,
Triangle Associates
6. Will Henderson,
MFA