Puget Sound Energy Resource Planning Advisory Group (RPAG) meeting summary

Thursday, February 26, 2026 | 1:00 – 3:15 p.m.

Meeting materials

- Presentation
- Meeting recording
- Meeting agenda

Meeting objectives

- Share an introduction to the cost test framework and solicit feedback
- Provide an overview of iterative gas and electric analysis for the 2027 Integrated System Plan (ISP)
- Discuss the electrification modeling approach for the 2027 ISP
- Provide an opportunity for public comments

Introduction and agenda review

Follow along: This information is on slides 1-8 of the presentation and 3:09 – 13:00 in the meeting recording.

Presenter: Annie Kilburg Smith, facilitator, Triangle Associates

Highlights:

- Taylor Bettine of Cadmus Group will present the electrification modeling approach for the 2027 ISP.
- EAG members Rachel and Glenda are joining the cost test discussion today.

Previous feedback recap

Follow along: This information is on slides 9-10 of the presentation and 12:57 – 16:02 in the meeting recording.

Presenter: Brian Tyson, Manager, Clean Energy Planning and Implementation, PSE

Highlights:

- PSE revised its approach to the maximum customer benefit sensitivity, required by rule for the 2027 ISP, in response to RPAG feedback at the Jan. 27 RPAG meeting.
- PSE is planning a single sensitivity that maximizes customer programs and prohibits new non-emitting resources without considering cost as a limiting factor.

Introducing the cost test and societal impacts

Follow along: This information is on slides 11-24 of the presentation and 16:07 – 1:05:34 in the meeting recording.

Presenter: Kara Durbin, Director, Clean Energy Strategy, PSE

Highlights:

- The cost test framework is outlined in WAC 480-96-030(8).
- This initial discussion is a starting point for future cost test conversations with the RPAG as well as PSE's Equity Advisory Group (EAG) and Conservation Resource Advisory Group (CRAG).
- The intent of the cost test is to monetize, quantify or qualitatively evaluate various portfolio benefits and impacts to ultimately inform selecting the lowest reasonable cost portfolio.
- PSE proposed categorizing various elements including rate impacts, utility system impacts, and societal impacts by how they could be potentially measured and offered draft definitions for each required cost test element.

RPAG members provided the following questions and feedback:

- RPAG member: What does PSE think describing the qualitative benefits might look like within the plan? Do you envision you might give more weight to monetized impacts versus qualitative?
    - PSE response: In the plan PSE will include the analysis of how we compared various portfolios to the reference case as well as how our analysis influenced the decision framework itself. We are open to input from the RPAG on how we approach weighting impacts; at the moment it's too early to definitively say which approach makes the most sense.
- RPAG member: I'm interested in further exploring how we might quantify reliability, resiliency and risk reduction.

- PSE response: We will talk more about these, especially risk reduction, later in this presentation and hear what ideas RPAG members have.

- I would like to see more information about how qualitative impacts will be incorporated and find out more about the model and how it works.
  - PSE response: We will cover some examples later in the presentation and can discuss that further today or offline.

- RPAG member: How do you compare qualitative impacts with monetized or quantitative measures in decision-making?
  - PSE response: We don't know yet exactly how we will analyze these various impacts; we would like to work with RPAG members on our approach. The cost test feeds into a broader decision framework and once we refine our analysis we can apply it towards more tangible results.

- RPAG member: Is there a monetary value assigned to a severity level, such as projected negative effects, for example?
  - PSE response: We want to continue to have conversations about what some of these elements might look like for this ISP and decide what is practical versus what we might refine in future ISPs.

- RPAG member: Reducing the load reduces the risk that we can't acquire supply-side resources. How do we capture that?
  - PSE response: Thank you for your feedback. We will take it into consideration.

- RPAG member: How would utility impacts internalize the potential benefits and financing costs due to lower risks?
  - PSE response: We are capturing one aspect of impacts through the host customer element but would love to hear additional thoughts.
  - RPAG member response: In the past migrating from fossil fuel to renewable assets lowered risks. PSE could explore different financing rates which might help reduce risk; retaining an expert in that field might be the best approach.

- RPAG member: Security of supply works both ways; you can have volatility of fuel and electricity.
  - PSE response: Thank you for your observation.

- RPAG member: How do you consider the interplay between your transmission supply to a resource with additions like batteries, which may help "firm up" supply?
  - PSE response: We are building this into the models by creating transmission zones and allowing the model to add multiple co-located resources. This allows us to optimize resources with the available transmission.

- RPAG member: Is the purpose of the cost test to produce a cost-benefit ratio? Some costs could potentially translate to benefits depending on how you structure them.
    - PSE response: The language in the cost test rules isn't clear on the intention of the cost test framework. The statute didn't change any of our existing cost-effectiveness tests. We are viewing the cost test as a broader consideration framework that has monetized, quantitative and qualitative elements.
    - RPAG member response: From a decision-making perspective you would look at the combination of lowest cost and better qualitative or quantitative impacts without even weighting them. But you will be able to rank the monetized cost options and use the lower cost options as a starting point.
    - PSE response: Thank you, that is generally how we are approaching that.

ISP iterative analysis overview

Follow along: This information is on slides 25-30 of the presentation and 1:05:35 – 1:25:40 in the meeting recording.

Presenter: Jennifer Coulson, Manager, Operations and Gas Analysis, PSE

Highlights:

- ISP scenarios examine various factors within the gas and electric utilities, including:
    - Supply optimization
    - Transmission and delivery optimization
    - Customer needs, priorities, and choices
    - The interplay between gas and electric utilities
- Final ISP scenarios are the basis for optimized portfolios, which PSE refines over time
- Iterative analysis involves:
    - Aligning inputs and assumptions within both the gas and electric utilities
    - Analyzing how the gas and electric systems respond to each other based on various inputs and assumptions
    - Refining results of various iterations in order to refine optimized portfolios
- PSE finalized five scenarios for the ISP, four of which Cadmus Group will cover in the presentation today

RPAG members provided the following questions and feedback:

- RPAG member: At what point are you considering conservation in the iterative analysis? Does the model consider the interplay between conservation and electrification?

- PSE response: We have incorporated conservation into the gas and electric demand forecast. However, we are testing different levels of conservation in some sensitivities.

- RPAG member: How is this planning different from previous Integrated Resource Planning (IRP) in terms of how gas and electric planning is integrated?
  - PSE response: In a traditional IRP the gas and electric systems were analyzed together but inputs and assumptions were not completely aligned. Each system had different challenges, rules and requirements. Transmission and distribution (T&D) in the IRP were not incorporated as in-depth as they will be for this ISP.
- RPAG member: Is there a way you consider grid enhancing technology to understand the impact on things like efficiency and cost savings?
  - PSE response: The electric T&D team incorporates grid modernization opportunities in their analysis and planning.
- RPAG member: Slide 29 says the reference case considers currently planned projects; does that encompass the entire planning horizon?
  - PSE response: The reference case only considers the projects that are currently planned and funded; they aren't forced into the demand forecast.

Electrification modeling approach

Follow along: This information is on slides 31-40 of the presentation and 1:26:08 – 2:10:36 in the meeting recording.

Presenter: Taylor Bettine, Senior Energy Specialist, Cadmus Group

Highlights:

- Cadmus' building electrification impact tool predicts electrification uptake over time.
- Inputs include Conservation Potential Assessment (CPA) inputs and assumptions and results of PSE's 2023 Decarbonization Study.
- Electrification scenarios include analysis of how residential and commercial PSE customers are predicted to electrify their gas appliances over time. This includes heat pumps, ovens, water heaters, furnaces, and clothes dryers.
- Electrification modeling is iterative and granular and informs future ISP cycles.

RPAG members provided the following questions and feedback:

- RPAG member: Is step five where the AURORA modeling begins?
  - PSE response: Yes, that's where the ISP analysis in its entirety sits.

- RPAG member: How does the model avoid double counting when it pulls impacts of electrification in step three through the CPA in step four and into the load scenario in step five?
    - Cadmus response: The model pulls the new load forecast into the load scenario in step five rather than the electric impacts themselves.
- RPAG member: Shouldn't rate impacts, meaning evolving rates and not present-day rates, heavily influence electrification?
    - PSE response: Projected long-term rates are represented in box zero. These rates are projected in our Decarbonization Study.
    - RPAG member response: Do you compare box zero with box six to see how much rates diverge to validate the modeling exercise?
    - PSE response: This will be apparent in the modeling results. Each ISP is iterative and our analysis will help close that gap in future cycles.
- RPAG member: Does the cost of different technologies influence the payback acceptance curve over time, especially for those without a market share?
    - Cadmus response: The curve itself does not change over time, but we do calculate payback every year. We don't incorporate cost learning curves but we could consider that in the future.
- RPAG member: Is it possible to have a sensitivity analysis of payback year calculations for slightly different rates to evaluate customer bill impacts versus capital costs? The curves might shift too much with varying rates.
    - Cadmus response: The curves themselves don't change with rates.
    - RPAG member response: Could you generate a sensitivity of the payback for specific appliance and see how much the curves change with changing rates?
    - Cadmus response: We would have to take some time to examine if that's possible.

Next steps and public comment opportunity

Follow along: This information is on slides 41-44 of the presentation and 2:10-33 – 2:18:52 in the meeting recording.

Highlights:

- March 5, 2026: Feedback form for the February 26, 2026 meeting closes
- March 26, 2026: RPAG meeting
- April 2026: No scheduled RPAG meeting
- James Adcock provided public comment.

- Participants were invited to complete a post-meeting feedback poll to share their insights and help improve future sessions.

Attendees

Attendees are listed alphabetically by first name. This list does not include viewers on PSE's YouTube channel.

RPAG members

1. Aliza Seelig
2. Dennis Suarez
3. Donald Williams
4. Fred Heutte
5. Froylan Sifuentes
6. Jaime McGovern
7. John Ollis
8. JP Carvallo
9. Katie Ware
10. Lauren McCloy
11. Megan Larkin
12. Quinn Weber
13. Sommer Moser

Presenters

1. Jennifer Coulson, PSE
2. Kara Durbin, PSE
3. Taylor Bettine, Cadmus Group

Support staff and facilitators

1. Alexandra Karpoff, PSE
2. Aquila Velonis, Cadmus Group
3. Brian Tyson, PSE
4. Claire Hornacek, Maul, Foster and Alongi (MFA)
5. Elizabeth Hossner, PSE
6. Kasey Curtis, PSE
7. Lorin Molander
8. Mark Lenssen, PSE
9. Meredith Mathis, PSE
10. Ray Outlaw, PSE
11. Wendy Gerlitz, PSE
12. Annie Smith, Triangle Associates
13. Phillip Popoff, PSE

Members of the public

1. Amir Valibeygi
2. Andrew Bena
3. Brian Devine
4. Brian Devine
5. Darren Gest
6. Edwin Hernandez

7. Ehsan Samani
8. James Adcock
9. Jesse Scharf
10. Matt Wills
11. Quentin Watkins
12. Rachel Gates
13. Ranae Beeker
14. Seth Baker
15. Sheryl Mayo
16. Sophie Major
17. Suzanne Tedrow
18. Teun Deuling
19. Tobyn Smith
20. Wesley Franks
21. Willard Westre