

Puget Sound Energy Resource Planning Advisory Group (RPAG) meeting

Meeting Summary

Tuesday, December 12th, 2023 | 10:00 - 1:00 p.m.

Meeting purpose and topics:

Below are the meeting topics of this Resource Planning Advisory Group (RPAG) meeting:

- Provide update of feedback from RPAG members
- Discuss feedback from public webinars
- Present updated Integrated Resource Plan (IRP) filing timeline and work plan
- Discuss scenario themes for the gas and electric IRP
- Review the scope and design of the Conservation Potential Assessment (CPA)
- Recap next steps
- Public comment opportunity

Agenda

Time	Agenda Item	Presenter
10:20 a.m. – 10:35 a.m. <i>15 min</i>	IRP timeline and work plan updates <ul style="list-style-type: none">• Updated draft timeline• RPAG and public meeting topics	Phillip Popoff , Director, Resource Planning Analytics
10:35 a.m. – 11:05 a.m. <i>30 min</i>	Gas scenario themes <ul style="list-style-type: none">• Discussion and whiteboard activity	Phillip Popoff , Director, Resource Planning Analytics
11:05 a.m. – 11:15 a.m. <i>10 min</i>	Break	All
11:15 a.m. – 11:45 a.m. <i>30 min</i>	Electric scenario themes <ul style="list-style-type: none">• Discussion and whiteboard activity	Elizabeth Hossner , Manager, Resource Planning and Analysis
11:45 a.m. – 12:45 p.m. <i>60 min</i>	Conservation Potential Assessment (CPA) scope and design <ul style="list-style-type: none">• Overview• Methodology• CPA timeline	Aquila Velonis , Cadmus Group

Time	Agenda Item	Presenter
12:45 p.m. - 1:00 p.m. <i>15 min</i>	Next steps and public comment opportunity	Sophie Glass , Facilitator, Triangle Associates
1:00 p.m.	Adjourn	Sophie Glass , Facilitator, Triangle Associates

The full meeting materials, including [agenda](#), [presentation](#), and [mural whiteboard](#) can be found online under the Dec. 12, 2023 meeting heading [on the IRP website](#).

Action Items

Below is a summary of actions from the Dec. 12, 2023, RPAG meeting.

What	Who	When
Schedule a convening assessment interview with Triangle	RPAG members	ASAP
Confirm dates for January RPAG meetings and send out individual registration links	PSE/Triangle	ASAP
Develop comprehensive list of policies, codes, and standards included in the CPA to share with RPAG Members	PSE/Cadmus	TBD

Introduction and agenda review

Sophie Glass, facilitator, provided an overview of the agenda for the meeting and welcomed RPAG members (see “RPAG members in attendance” on the last page for a list of RPAG members who joined this meeting).

RPAG feedback update

Sophie shared updates on the facilitation team’s convening assessment. This assessment provides the space for RPAG members to share their hopes and concerns regarding the RPAG process and the charter during one-on-one conversations with the facilitation team. As of Dec. 12, 2023, the facilitation team has had conversations with eight of the RPAG members with two members being rescheduled. Sophie requested the two remaining RPAG members who have yet to respond to the facilitation team’s scheduling request to be in contact as soon as possible. The facilitation team will present a tracked changes version of the charter with RPAG member edits for approval and a full thematic summary of the convening assessment at an upcoming January 2024 meeting. The Western Energy Storage Taskforce withdrew their participation from the RPAG due to funding issues.

Public webinar feedback update

Kara Durbin, PSE, shared feedback from the Nov. 6, 2023 Equity in Delivery System Planning public webinar and Nov. 15, 2023 Energy Efficiency and Demand-Side Resources public webinar. Themes from public feedback and participation statistics for each webinar are detailed in the posted slides. In total, PSE has held five public webinars this fall. The majority of public feedback has been around the new process and clarifying questions which for the most part were answered live or through the chat feature.

PSE also utilizes a feedback report option for longer answers. Equity in delivery system planning is on the RPAG agenda for 2024, and PSE will share more detailed public feedback at that time from the webinar and from the Equity Advisory Group (EAG), which has also been involved in robust discussion on this topic. Energy efficiency and demand-side resources play an important role in the Conservation Potential Assessment (CPA), which is on the agenda for the RPAG in January. The summary from this public webinar will be posted on the PSE website soon.

An RPAG member shared a comment about their difficulty logging in to the meeting. PSE responded that members received an automatic email from Zoom with their link however this might get filtered out. PSE will follow up with presenters regarding their individual zoom links to facilitate the log-in process for the next meeting.

IRP timeline and workplan updates

Philip Popoff, PSE, shared PSE's timeline and workplan for the 2025 Electric Integrated Resource Plan. This timeline includes the requested extension to file the IRP on March 31, 2025, to have additional time to work through alternative portfolios especially on the electric side. PSE filed their workplan with the commission on Dec. 15, 2023.

In response to a comment that the Clean Energy Implementation Plan (CEIP), and the IRP should be filed concurrently, PSE responded that they are constrained by the law which sets their filing dates for the IRP in January and the CEIP in October.

Philip shared PSE's timeline and workplan for the 2025 Gas IRP and answered questions from RPAG members.

- In response to a question about how the Gas IRP will be affected due to anticipated to load shifting due to electrification, PSE responded that results from the gas decarbonization study might not be finalized for the draft IRP that gets published due to the intercedences with the electric analysis, but it will certainly impact the final IRP filed in March.

- In response to a question about how PSE implements lessons learned from scenario designs in IRP modeling, PSE responded that they consistently keep stock of lessons learned as the IRP is developed.

Gas scenario themes

Jennifer Coulson, PSE, shared the 2025 gas IRP scenario themes that are being considered for the development of scenarios. She highlighted that 2023 was the first time PSE implemented decarbonization factors such as the Climate Commitment Act (CCA), renewable fuels such as biomethane and hydrogen, and policy driven electrification of buildings. New this year, PSE will be incorporating their targeted electrification strategy as a decarbonization factor.

Electric scenario themes

Elizabeth Hossner, PSE, shared the electric scenario themes that are being considered for the development of the scenarios. Elizabeth highlighted how the Washington Administrative Code (WAC) rules passed after the Clean Energy Transformation Act (CETA) define specific scenarios that PSE needs to examine.

There are seven electric scenario themes PSE is considering. The first three themes come from the WAC rules. The first theme is CETA conditions and renewable non-emitting requirements and the social cost of carbon. The second theme is climate change modeling which is already incorporated into the base assumptions. PSE is not looking at any additional modeling regarding this theme. The third theme is maximum customer benefit. PSE encourages RPAG members to look at the scenario and give PSE feedback on how to define this third theme.

The additional four scenario themes PSE is considering are planning standards, demand, resource alternatives, and transmission. PSE is open to suggestions for additional electric scenario themes.

Whiteboard activity

Sophie led RPAG members through an interactive whiteboard activity to identify important issues to be addressed in the IRP. This brainstorm asked RPAG members to consider what components associated with each major topic PSE should focus on during its analyses. The whiteboard activity resulting from this robust and productive discussion can be viewed on the [IRP website](#). PSE is reviewing this feedback and will present the resulting scenarios for analysis during a future RPAG meeting.

Conservation Potential Assessment (CPA) scope and design

Aquila Velonis, Cadmus Group, presented on the 2025 IRP Conservation Potential Assessment (CPA). The slides are posted on the [IRP website](#). After an agenda overview, Aquila dove into an overview of the ten main themes of the CPA. He highlighted Inflation Reduction Act (IRA) research and impacts along with process evaluation research as two new themes for the 2025 IRP. He additionally shared the difference in types of energy efficiency potential between the CPA modeling and the IRP. Aquila detailed the methodology for estimating conservation potential.

Cadmus is estimating technical and achievable electric and natural gas energy efficiency potential for PSE's residential commercial and industrial sectors. They are incorporating work from PSE's phase 1 electrification study to incorporate electric end uses. They are also assessing the impact of energy efficiency for each of the fuels accounting for electrification scenarios and including federal, state, and local codes and standards.

Aquila shared a brief list of planned updates for the CPA and key changes from the prior CPA.

New to the CPA this year, Cadmus is conducting a program process evaluation through in-depth interviews with program staff on the four measure categories that show a significant divergence between planned potential and actual savings in programs. Ultimately Cadmus is updating ramp rates and other inputs for measures to align for this new CPA.

Additionally, Camus is conducting research on IRA funding opportunities to get a better sense of how funding is going to be implemented and identify the opportunities where PSE programs can align with or leverage IRP rebate programs.

Aquila shared that as part of the scenario analysis, Cadmus is estimating reduction in natural gas usage from converting non-electric to electric equipment. Cadmus is leveraging prior data from the 2023 IRP, cold climate heat pump performance research, and customer survey research in their analysis.

Regarding underserved communities and equity, Cadmus found that vulnerable populations best aligned with the CPA geographic areas so they will continue to use vulnerable populations as a preference over highly impacted communities defined by the Washington Department of Health.

Cadmus is estimating the technical and achievable potential for the demand response options of reducing peak load in both winter and summer. Electric vehicle product options in both residential and commercial sectors are a new addition to the demand response.

Cadmus is also assessing the technical and achievable combined heat and power (CHP) potential and the rooftop solar photovoltaic (PV) achievable market potential. To assess Solar PV Cadmus is using NREL's Distributed Generation Market Demand model (dGEN) and Google Project Sunroof data to simulate customer adoption of rooftop solar and determine PV potential in specific PSE zip codes instead of doing one estimate for the entire service area.

Aquila lastly discussed the IRP bundles and locational analysis. Overall, this analysis provides more granularity than in the last CPA. The separate draft gas and electric reports will be filed in March-April 2024 and the final reports will be filed April-May 2024.

In response to a question regarding the mismatch between the potential identified by past CPA's and what is achieved by PSE, Aquila shared that the ramp rate, weatherization, and natural gas furnace adoption rates were contributors to the mismatch. Previously, for discretionary measures like retrofit the CPA study frontloaded retrofit measures in the first half of the study. This resulted in being less realistic for some programs where the acquisition is a more gradual incline over time. Cadmus is in the process of further investigating this.

In response to a question regarding end-of-life replacements, Aquila clarified that incorporating 2029 furnace standards changes the baseline forecast. Cadmus is accounting for the iteration between retrofit and equipment type in their modeling.

In response to a question on accessing a full list of the policies, codes and standards that were included in the assessment, PSE committed to working with Cadmus to develop a more comprehensive list to share back to RPAG members.

In response to a question about how PSE is equipped to account for the Department of Commerce's decision regarding the implementation of IRA funding, Aquila shared that Commerce has been reaching out to utilities for collaboration and that PSE has a good idea of how funds are going to be distributed and this is being incorporated into the analysis.

In response to a question about the assumptions in reductions in natural gas usage, Aquila clarified that they are looking at both a declining number of customers due to full electrification, and declining gas usage per customer due to partial electrification.

In response to a question regarding demand response (DR) assumptions, PSE shared that they are using updated DR assumptions and are incorporating information from newly or soon to be launched pilots.

Next steps

- December 14, 2023: feedback form closes for the Hydrogen Public Webinar
- December 15, 2023: revised IRP work plan due to UTC
- December 19, 2023: feedback form closes for Dec. 12, 2023 RPAG Meeting

PSE will send out registration links for upcoming January 2024 RPAG meetings.

Public comment opportunity

You can read public comments and PSE's responses in full on the [PSE IRP website](#).

Don Marsh, speaking on behalf of the Washington Clean Energy Coalition shared that the maximum customer benefit measure is very important to him. He believes customers are interested in their rate payer dollars being used as efficiently as possible for decarbonization goals. He shared his skepticism that hydrogen delivers maximum benefit when replacing natural gas and would like to see more evidence. He believes the best use of hydrogen is used for industrial heat. He is curious whether there are situations where natural gas is the least cost and believes PSE should include the lifetime impact of greenhouses gas emissions as part of their calculation. Don believes electrification is more likely to qualify for IRA funding and less likely to be impacted by CCA. He additionally shared he would like to see PSE focus on their geographic service area where they serve both gas and electric energy. Lastly, he expressed frustration over his inability to register for PSE's flex smart program and electric vehicles and listed this as an example of mismatch.

James Adcock, electrical engineer, has been a dozen year member of the IRP process. James shared his concern regarding hydrogen that PSE is double counting environmental benefits. He is also concerned about PSE having private one on one meetings with RPAG members which he believes goes against PSE's public commitment. Furthermore, James is concerned that PSE has not presented what he views as technical content at these RPAG meetings. Lastly, James shared his opinion that PSE is acting with a lack of urgency to meet the CETA 2038 requirement and he is worried PSE will build new additional gas generation.

Virginia Lohr, PSE customer on Vashon Island believes people in the IRP are in privileged positions to address climate change and urges PSE to act with urgency. She referenced the article "Global Warming in the Pipeline" published by Dr. James Hansen in September.

Adjourn

The meeting was adjourned at 5 p.m.

Attendees¹ (alphabetical by first name)

1. Austin Nnoli
2. Bob Edmiston
3. Brandon Green
4. Carol Loughlin
5. Chris Smith
6. Christopher White

¹ These numbers do not include viewers on [PSE's YouTube livestream](#)

7. Claire Moerder
8. Don Marsh
9. James Adcock
10. Jesse Durst
11. Jesse Scharf
12. John Deese
13. Kate Brouns
14. Kathi Scanlan
15. Kelly Xu
16. Ken Pratt
17. Marcus Sellers-Vaughn
18. Matt Chill

19. Megan Lacy
20. Michael Brutocao
21. Norm Hansen
22. Patrick Leslie
23. Randy Hardy
24. Rosemary Moore
25. Ross Tyler
26. Seth Baker
27. Sommer Moser
28. Susan Christensen Wimer
29. Virginia Lohr

RPAG members in attendance

1. Aliza Seelig
2. Dan Kirschner
3. Ezra Hausman
4. Froylan Sifuentes
5. Jim Dennison

6. Joel Nightingale
7. Katie Chamberlin
8. Lauren McCloy
9. Megan Larkin
10. Stephanie Chase

Presenters

1. Aquila Velonis, Cadmus Group
2. Elizabeth Hossner, PSE
3. Jennifer Coulson, PSE
4. Kara Durbin, PSE

5. Lorin Molander, PSE
6. Meredith Mathis, PSE
7. Phillip Popoff, PSE

Other PSE staff

1. Ray Outlaw
2. Wendy Gerlitz
3. Megan Slater

Facilitation staff

1. Emilie Pilchowski
2. Pauline Mogilevsky
3. Sophie Glass
4. Will Henderson