

## Integrated Resource Plan (IRP) January 20, 2022 Meeting Summary

v. 2/24/2022

### Meeting Date, Time & Materials

- Date: Thursday, January 20, 2022
- Time: 1 – 4 p.m.
- Link to [Meeting materials](#)

### Action items from January 20 IRP Meeting

What	Who	When
Follow up with Katie Ware about slide 14 of the <a href="#">presentation</a> in response to her question “What does the model look like initially and what is the thought process to diversify after?”	Puget Sound Energy (PSE) (Kara Durbin)	Included in feedback form
Follow up with stakeholders about the timeline for time varying rates.	PSE (Gurvinder Singh)	Included in feedback form
Send Joni Bosh link to Appendix E2 Tab 1 of the CEIP which explains the incremental cost calculation.	PSE (Wendy Gerlitz)	1/20
Follow up with Joni Bosh in response to question: “The three models come up with a range of temperatures, do you average them? How do you treat the range of temps and models to get your green lines?”	PSE (Allison Jacobs)	Included in feedback form
Follow up with Amy Wheelless/NWEC in response to comment: “For EE, it’s challenging to say incremental, since there isn’t any one program that is for CETA – it’s more peanut buttered around.”	PSE (Wendy Gerlitz)	1/21 – email communication explaining Energy Efficiency incremental cost sent to Joni Bosh at NWEC.

## Summary of IRP comments and questions

### Update on Final Clean Energy Implementation Plan (CEIP)

- IRP stakeholders have ongoing concerns about potential fossil fuel facilities between now and 2025. PSE shared that it does not have plans to build a natural gas peaking plant during the CEIP period of 2022-2025. However, PSE does have a capacity need identified in the IRP beginning in 2026, and the responsibility to maintain a reliable system. PSE needs to find a way to meet that need, which is what the All-Source RFP process is beginning to evaluate. PSE prefers resources that both qualify as renewable or non-emitting resources under CETA and can also meet our capacity need.
- IRP stakeholders are supportive of the plans for increased solar and Distributed Energy Resources (DER) programs.
- IRP stakeholders are interested in the RFP process, particularly in PSE's plans to build or acquire additional wind resources.
- IRP stakeholders encouraged PSE to consider on-bill financing.
- See slides 12-23 of the [meeting materials](#)

### Reflecting Climate Change in Load Forecasting

- PSE's approach to climate change modeling is important to IRP stakeholders. Questions and suggestions included modeling more specific to PSE's service territory, expanding weather stations beyond SeaTac to include other locations in PSE's service area, and consulting with climate scientists at the University of Washington.
- IRP stakeholders were generally supportive of PSE's approach to incorporating climate change into the demand forecast and IRP.
- IRP stakeholders are interested in the 2023 Electric Progress Report including any forecasted changes in vehicle and building electrification.
- See slides 31-60 of the [meeting materials](#)

### Conservation Potential Assessment (CPA)

- IRP stakeholders are interested in how time-varying rates and electric vehicles might impact the CPA.
- See slides 61-65 of the [meeting materials](#)

## Summary of IRP Breakout Groups

### Conservation Potential Assessment (CPA) and Climate Change Breakout Group

- IRP stakeholders asked PSE to consider the following topics for the CPA:
  - How PSE can be a driver for efficiency improvements and encourage customers to use PSE incentives.
  - Expand assistance for low-income programs to improve energy efficiency.
  - Improve customer awareness of programs and efficiency services.
- IRP stakeholders asked how the CPA is incorporated into the CEIP.
  - PSE shared that the CEIP uses numbers from the Biennial Conservation Plan.
- IRP stakeholders would like PSE to consider the following topics for future analysis:

- The importance of accurate, local modeling.
- Choosing climate change models that reflect the future of PSE.

## Engaging in 2023 IRP Reports Breakout Group

- IRP Stakeholders provided feedback on topics for upcoming IRP meetings in 2022:
  - *Meeting 2*: Legislative session highlights and takeaways, resource modeling, plans for distributed energy resources, and vehicle to grid.
  - *Meeting 3*: Updated resource modeling, resource adequacy, and modeling techniques.
  - *Meeting 4*: No feedback
  - *Meeting 5*: No feedback
- Other questions included meeting timeline, plans to discuss Distributed Energy Resources, and resource alternatives.

See Appendix for Mural boards from each breakout group.

## Next Steps

- PSE will review feedback from the meeting to shape the future engagement strategy.
- PSE will reach out to IRP stakeholders with a meeting schedule. The date of the next IRP meeting is to be determined.
- The feedback form will be available on February 24, 2022.

## Attendees (alphabetical by first name)

1. Aaron Tam, *Office of Attorney General*
2. Amir Sanjar, *Matrixes Corp*
3. Amy Wheelless, *NWEC*
4. Anne Newcomb
5. Anusha Papasani, *Hecate Energy*
6. Austin Nnoli, *GE*
7. Bill Pascoe, *Pascoe Energy*
8. Bill Will, *WASEIA*
9. Brian Robertson, *CNGC*
10. Brian Grunkemeyer, *Flex Charging*
11. Carol Loughlin
12. Carolyn Logue
13. Charlee Thompson
14. Chris Walford
15. Cody Duncan, *TransAlta*
16. Corey Dahl, *Office of Attorney General*
17. Daniel Handal, *NextEra Energy*
18. David Huffines, *BP*
19. David Tomlinson, *Solar Horizon*
20. Debashis Bose, *1898 & Co*
21. Don Marsh, *Sierra Club*
22. Doug Sabine, *TransAlta*
23. Ellyn Murphy
24. Eric Markell
25. Fred Huetten, *NWEC*
26. Halley Miklos, *Con Edison Clean Energy Business*
27. Howard Harrison
28. James Adcock
29. James Doone, *esVolta*
30. Jennifer Snyder, *UTC*
31. Jeralee Anderson, *City of Redmond*
32. Jeremy Summers, *Auto Grid*
33. Jessica Neely, *Hecate Energy*
34. Jim Schretter, *Beacon Energy*
35. Joel Nightingale, *UTC*
36. John Fazio, *Northwest Power and Conservation Council*
37. Joni Bosh, *NWEC*
38. Kathi Scanlan, *UTC*
39. Katie Ware, *Renewable Northwest*
40. Kelly Goodman
41. Kendra White, *UTC*
42. Lindsay Osier, *Energy Solution*
43. Lloyd Reed, *Lloyd Reed Consulting*
44. Lori Hermanson, *Avista*
45. Marcus Sellers-Vaughn, *Cascade Natural Gas Corporation*
46. Marilyn Subala
47. Mark Klein, *Broad Reach Power*
48. Markus Virta, *Western Solar Inc.*
49. Marty Saldivar, *Williams Companies*
50. Matthew Mahoney, *City of Des Moines*
51. Michael Berry, *Q Cells*
52. Nathaniel Lawver, *Laborers Local 252*
53. Nelli Doroshkin, *Invenergy*
54. Norm Hansen
55. Owen Hurd, *Tuusso Energy LLC*
56. Pamela Braff, *City of Olympia*
57. Patricia Tuor
58. Patrick Leslie, *Monolith Energy*
59. Patty Cook, *ICF Energy*
60. Peter Besenovskiy, *Sagestone Ventures*
61. Phil Ritter
62. Phillip Schmidt-Pathmann
63. Court Olson, *People for Climate Action*
64. Randall Hardy, *Hardy Energy*
65. Robert Healy, *1898 & Co*
66. Shashwat Roy, *Renewable Northwest*
67. Stacy Vynne McKinstry, *City of Issaquah*
68. Stephanie Chase, *Office of Attorney General*
69. Steve Lewis, *Sapere Consulting*
70. Sue Gunn
71. Thomas Cameron, *Mitsubishi Power Americas*
72. Warren Halverson, *Frontier Energy*
73. Willard Westre

## Puget Sound Energy Presenters (alphabetical by first name)

1. Allison Jacobs
2. Brian Tyson
3. Diann Strom
4. Elizabeth Hossner
5. Gurvinder Singh
6. Kara Durbin
7. Phillip Popoff

## Puget Sound Energy Staff Listeners (alphabetical by first name)

- |                            |                       |
|----------------------------|-----------------------|
| 1. Abhimanyu Das Choudhury | 24. Mahmoud Ghofrani  |
| 2. Anthony O'Rourke        | 25. Marc Alberts      |
| 3. Brett Rendina           | 26. Michelle Wildie   |
| 4. Caity Du                | 27. Nick Gemperle     |
| 5. Chris Smith             | 28. Niece Weatherby   |
| 6. Cindy Song              | 29. Ping Liu          |
| 7. Cindy Vu                | 30. Renchang Dai      |
| 8. Colin Crowley           | 31. Robert Williams   |
| 9. Cuong Nguyen            | 32. Roxana Vilchis    |
| 10. David Meyer            | 33. Sara Leverette    |
| 11. Doug Hart              | 34. Sheri Maynard     |
| 12. Eric Kang              | 35. Stephanie Price   |
| 13. Heather Mulligan       | 36. Tyler Tobin       |
| 14. Jennifer Coulson       | 37. Tom Flynn         |
| 15. Jesse Durst            | 38. Villamor Gamponia |
| 16. Jisong Wu              | 39. Weimin Dang       |
| 17. John Dooley            | 40. Will Einstein     |
| 18. Josh Jacobs            | 41. Wendy Gerlitz     |
| 19. Kelly Xu               | 42. Zac Yanez         |
| 20. Lawrence Becker        | 43. Zeia Lomax        |
| 21. Laxman Subedi          | 44. Zen McManus       |
| 22. Leslie Almond          | 45. Zhi Chen          |
| 23. Lorin Molander         | 46. Scott Williams,   |

## Consultant Staff (alphabetical by first name)

1. Claire Wendle
2. Jacob Hibbeln
3. Lucila Gambino
4. Seth Baker
5. Sophie Glass
6. Taylor Hodges
7. Will Henderson

## Appendix – Mural Board Notes from Breakout Groups

### Puget Sound Energy Integrated Resource Plan Stakeholder Meeting Engaging in 2023 IRP reports

#### Room 1: Engaging on the 2023 reports

What topics are important to IRP stakeholders when it comes to providing input on the 2023 reports (2023 Electric Progress Report and 2023 Gas Utility IRP)?

What recommendations do IRP stakeholders have when it comes to topics for future meetings?

We are here



Meeting 1

Feedback on:

- Stakeholder engagement
- CPA considerations
- Climate change temp. assumptions for future analyses

Meeting 2

Updates on:

- Planning assumptions
- Resource Adequacy draft results

Feedback on:

- Resource alternatives
- Generic resource costs & assumptions
- Carbon price for CCA

PSE - Will take place Q2

Get a highlight from leg. session and general takeaways  
Things from committees that would impact the timeline

Vehicle to grid topic - Where EV batteries become two way and are used as a storage mechanism

Discuss plans on distributed energy resources - feedback on battery storage

What meeting will you talk about resource modeling

Meeting 2

What else?



Meeting 3

Updates on:

- Final resource need
- Final CPA results
- Delivery system planning

Feedback on:

- Gas resource alts
- Applying CBIs to Progress Report

Meeting 3 will include the demand forecast, results of the resource adequacy and peak needs

PSE - Will take place sometime over the summer, 2022

Updated resource modeling discussion

Deep dive on resource adequacy  
As PSE works to incorporate recommendations, it would be nice to get an update from PSE as information from the RFP is released (specifically the capacity need)

PSE - Need to be careful when talking about natural gas. We will be looking at is a resource alternative for both. PSE is going to be doing pilot work at one of their existing turbines...All hydrogen generation will be a resource as well

PSE can provide an overview of the resource modeling process. Would like PSE to review new modeling techniques. Wisdom P plus - by vibrant energy.

Does PSE have an opinion on hydrogen and its potential use as an alternative to natural gas? Will that be incorporated into long-range planning?

PSE - resource adequacy is being done as a part of the electric strategy report - everything is being done in the IRP

Meeting 4

Updates and feedback on draft results of electric and gas portfolio.

PSE - Will take place November, 2022 as the draft will be out by the end of the year

Meeting 5

Updates and feedback on draft Electric Progress Report and Gas Utility IRP

PSE - comment period will be Feb - march at the latest; Final will be out April 1st

Other questions

As renewables become a more important part of the energy mix, any plans to discuss your plans on Distributed Energy Resources (DER)?

Do you have a general timeline for when these meetings will take place?

May, August, November? We are still figuring out Q1 2023

Does PSE have an opinion on hydrogen and its potential use as an alternative to natural gas? Will that be incorporated into long-range planning?

Need to be careful when talking about natural gas. We will be looking at is a resource alternative for both. PSE is going to be doing pilot work at one of their existing turbines...All hydrogen generation will be a resource as well

ELCC comes from the resource adequacy model. When we talk about resource adequacy it includes both the ELCC and

**Puget Sound Energy Integrated Resource Plan Stakeholder Meeting**  
**Conservation Potential Assessment and Climate Change Temperature Assumption**

## Conservation Potential Assessment

**What questions do you have about the CPA and the *process* to develop it (e.g. data, assumptions, and scenarios)?**

when developing CPA assessment and getting BCP, how much of CPA is carried into CEIPs? what is in the BCP goes in the 937 targets.

CEIP using numbers from BCP. estimates for BCP is based on prorated share of the 10 year. for the latter 2 years, relied on this info in the BCP. incremental costs methodology explained in CEIP.

Wendy will follow up with Joni about this topic in the appendix

how much more conservation are they actually getting?

**Reflecting on past CPAs, are there topics you'd like PSE to consider?**

aspects of time of use modeling and how PSE decides what kilowatt/hour costs will be (future)	asking PSE to make a one year commitment to these kinds of programs	PSE has seen a conservation effect when people are more aware. quick action to get pilot incorporated in general rates.	PSE incentives for efficiency improvements are helpful, but not drivers. owners will do what they're going to do regardless of incentives. would like to see PSE become a driver. financing mechanism.
would like to see PSE cost effective formula to encourage people to use PSE incentives	demand response is part of conservation	time varying rates	PSEs low income weatherization programs provide some incentives. as a result of CETA, looking to expand equity.

those that would most benefit from financial help are low income. the more we can help lower income become more energy efficient the better.

Discuss drivers such as MEETS - not set up in a way that's easy to finance

## Climate Change Temperature Assumption

**Any specific questions about the climate change temperature assumption?**

**What other considerations should PSE reflect on for *future* analyses?**

the more accurate the local modeling can be the better. important to have most accurate forecast.

these models chosen to reflect models across the PNW - not the future for PSE.

important to not get overly fixated on models.