

# Meeting Summary and Feedback Report

Portfolio Benefits Analysis Drop-In Sessions

## Meeting Information

- Wednesday, September 28, 9:00 a.m. - 10:00 a.m.
- Friday, September 30, 1 p.m. – 2:00 p.m.
- Tuesday, October 25, 5:00 p.m. – 6:00 p.m.
- Virtual webinar hosted by PSE
- Links to:
  - [Presentation](#)
  - [Customer Benefits Indicator Calculator](#)

## Meeting Summary

### Portfolio Benefits Analysis Background and Overview

This information can be found on slides 1-7 of the presentation.

- Brian Tyson, PSE Manager of Clean Energy Planning and Implementation, presented the background purpose of the drop-in sessions
  - Improving methodology for considering customer benefits in portfolio analysis
  - Discuss potential approaches and seek feedback from stakeholders

## Methodologies

This information can be found on slides 8-17 of the presentation.

- Brian Tyson discussed approaches and methodologies to identifying and weighting Customer Benefit Indicators (CBIs)
  - Defining CBIs that we can use from AURORA output
  - Set lowest cost portfolio as base portfolio against which to evaluate other portfolios
  - For each portfolio, convert raw numbers to an index: index each CBI based on a comparison to the corresponding CBI from the base portfolio
  - Compare portfolios: plot each portfolio on a chart showing the CBI index versus portfolio cost.

## Assessment Tool

This information can be found on slides 18-20 of the presentation.

- Tyler Tobin reviewed the assessment tool ([Customer Benefits Indicator Calculator](#))
  - How individuals can utilize the tool to consider different scenarios
  - How the tool could be used to weight different indicators

## Feedback Report

The following table records the IRP stakeholder unanswered questions and PSE responses from the Portfolio Benefits Drop-In Sessions discussion with IRP stakeholders and the meeting’s feedback form. Meeting materials are available on the project [website](#).

Date	Stakeholder	Comment	PSE Response
10/11/22	James Adcock	As I expressed at the September 30 meeting, PSE current method of "Benefits Analysis" is meaningless because PSE can choose any weighting it wants for evaluation. PSE showed their choice of metric, which de-emphasizes reducing GHG, and emphasizes many approaches of things residential customers might or might not choose to do in their homes. For comparison, I took PSE's metrics and applied a different set of weighting factors -- and came up with an entirely different set of results, preferring portfolio A	<p>PSE is aware of the limitations of this approach as discussed during the sessions and, if this approach is used, will take steps to ensure transparency in the process.</p> <p>The CBI metrics used were identified through stakeholder feedback during the development of the CEIP, including multiple stakeholder groups and the public.</p>

Date	Stakeholder	Comment	PSE Response
			<p>We do not currently have the capability to translate all CBIs/non-energy benefits into dollar values due to modeling limitations, but plan to explore this more in the future. If PSE employs this methodology for the 2023 Electric Progress Report, the CBI indices will not be weighted.</p> <p>CETA requires PSE to look beyond greenhouse gas emissions to ensure the equitable distribution of energy and non-energy benefits and reduction of burdens to vulnerable populations and highly impacted communities. You can view more about those regulations in RCW <a href="#">19.405.040</a>.</p>
10/12/22	Aaron Tam, Public Counsel	<p>Public Counsel Unit attended the September 28 Portfolio Benefits Analysis Drop-in. We appreciate that PSE is attempting to address some of the major concerns that we have raised in regards to PSE's application of Customer Benefit Indicators (CBIs) to resource selection in the CEIP process. We appreciate the cost-effectiveness assessment that compares CBIs with portfolio cost. We also appreciate the Company recognizing that some CBIs should be excluded from resource selection because they are more relevant to program implementation or other purposes. We offer brief feedback and questions for PSE to consider in the development of its Portfolio Benefits Analysis.</p> <p><b>1. Public Counsel offers the following feedback on the Portfolio Benefits Analysis:</b></p> <p>There was a concern raised during the Portfolio Benefits Analysis meeting that the CBI index methodology could bias results based on the portfolios being compared. We recommend that PSE provide a transparent process for</p>	<ol style="list-style-type: none"> <li>1. Thank you. PSE will include a record of all portfolios assessed in development of the preferred portfolio, as well as all CETA compliant sensitivities. If a sensitivity/portfolio is excluded from the analysis, a record of the reason for exclusion will be provided. <ol style="list-style-type: none"> <li>a. Thank you. PSE will correct this typo in a future revision.</li> </ol> </li> <li>2. Qualitative CBIs are not yet considered in resource selection in the IRP process. PSE is still working to develop methods to fairly and transparently incorporate the influence of qualitative CBIs such as "Improved home comfort" in the IRP resource selection process.</li> <li>3. If PSE employs this methodology for the 2023 Electric Progress Report, the CBI indices will not be weighted. PSE intends to rely heavily on</li> </ol>

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		<p>portfolios that are included and excluded for comparison, along with sensitivity analyses if necessary.</p> <p>a. There is a typo on the "DER_Participation" spreadsheet in the CBI Calculator workbook. "DR Peak Capacity (MW)" should read "DER Peak Capacity (MW)."</p> <p><b>Public Counsel has the following questions on the Portfolio Benefits Analysis:</b></p> <p>2. What qualitative CBIs does PSE think are relevant to resource selection? How are qualitative CBIs used in the IRP resource selection process? To what extent would the Company rely solely on the results of this quantitative modelling for portfolio benefits analysis and resource selection?</p> <p>3. How is PSE planning on selecting the weights for the CBIs? How does the role of the advisory groups in the CBI weighting process compare to other stakeholders or customers? Public Counsel encourages a weighting to be determined through a robust stakeholder process. The weighting system should be transparent and logical to properly represent stakeholders' priorities.</p> <p>4. The slide deck has an appendix that asks for feedback on how to measure emissions metrics. We believe change in emissions over planning period makes the most sense unless all the portfolios have different baselines. Do the portfolios being compared all have the same baseline portfolio emissions, or are they different for each? What are</p>	<p>stakeholder feedback to develop any future weighting scheme for the CBI indices. PSE is considering several methods to collect stakeholder feedback including: listening sessions, additional drop-in sessions, interviews and surveys.</p> <p>4. Thank you for reviewing the additional discussion questions. All portfolios included in the analysis will have the same initial portfolio assumptions and will therefore have the same starting emission value. PSE has considered the following methods for quantifying emissions:</p> <ul style="list-style-type: none"> <li>• Emissions reduction over the modeling horizon: STARTING EMISSIONS minus ENDING EMISSIONS. This measure assesses two snapshots in time, the beginning and end of the modeling horizon. It illustrates the decline in emissions over the modeling horizon; however, it lacks insight into the rate of emissions reduction. For example, two portfolios one which achieves zero emissions in 2040 and one in 2045 would measure the same using this method.</li> <li>• Sum of all emissions over the modeling horizon: ADD annual emissions quantity. This measures the total amount of emissions from the portfolio for each year of the study. It illustrates the overall impact of emissions over the entire modeling horizon and includes the rate of emissions reduction.</li> </ul> <p>5. Thank you for your feedback. PSE agrees with Public Counsel that using the Total Cost, which</p>

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		<p>the advantages and disadvantages for each emissions metric measurement approach?</p> <p>5. Why is the "Cost" metric measured as the "revenue requirement without emissions"? The inclusion of the social cost of greenhouse gas emissions (SCGHG) as a cost adder is required by RCW 19.280.030(3). How is the SCGHG incorporated here? Why is it not incorporated if it is not included in the cost estimate? We are also concerned about potential double-counting of benefits if greenhouse gas emissions are both incorporated as a CBI as well as a part of the cost estimate.</p> <p>6. The CBI calculator workbook uses some vague terminology to decide new resource builds. In the "Cumulative Capacity" spreadsheet of the CBI Calculator workbook, what is the difference between "DER roof" and "DER Solar PV"? What is new "demand-side resource"?</p> <p>We would appreciate answers to the questions posed above. You may reach out to me at <a href="mailto:aaron.tam@atg.wa.gov">aaron.tam@atg.wa.gov</a> for follow-up or further questions.</p>	<p>includes both direct cost and externality costs would be appropriate. PSE will make that change in the 2023 Electric Progress Report.</p> <p>6. Please note that the data populated in the example spreadsheet is reflective of generic resource technologies included in the 2021 IRP. These generic resource technologies will be updated to be reflective of those discussed in the March 22, 2022 Webinar for the 2023 Electric Progress Report.</p> <p>DER Roof – represents a roof mounted, distributed solar resource</p> <p>DER Ground – represents a ground mounted, distributed solar resource</p> <p>Demand-side Resource – represents new conservation (also known as energy efficiency) measures</p>
	Jennifer Snyder, UTC	<p>Overall, Staff finds approach 2 described in the drop-in sessions to be a reasonable step forward in analyzing benefits for the IRP progress report. While ultimately an analysis that accounts for all appropriate impacts using a combination of PSE system-specific studies, outside studies, and well-informed proxies should be used, Staff realizes this is an iterative process and will take time to accomplish.</p> <p>There are non-trivial concerns that this approach opens up the ability for PSE to "game" the outcome. PSE should be</p>	<p>Thank you for your observations and feedback. PSE is aware of the limitations of this approach as discussed during the sessions and, if this approach is used, will take steps to ensure transparency in the process.</p> <p>The Portfolio Benefits Assessment discussed during the drop-in sessions is not intended to satisfy the requirements of WAC 480-100-620, which are requirements for the IRP and not an electric progress report, although it does satisfy some of those requirements in part.</p>

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		<p>cautious about these optics and ensure maximum transparency when using this approach.</p> <p>Staff requests clarification on the rules this approach is intended to comply with and may have additional comments once known. Please describe how this approach satisfies the following rules:</p> <p>WAC 480-100-620</p> <p><b>(9) Economic, health, and environmental burdens and benefits.</b> The IRP must include an assessment of energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits, costs, and risks; and energy security risk. The assessment should be informed by the cumulative impact analysis conducted by the department of health.</p> <p><b>(10)(c)</b> At least one sensitivity must be a maximum customer benefit scenario. This sensitivity should model the maximum amount of customer benefits described in RCW 19.405.040(8) prior to balancing against other goals.</p> <p><b>(13) Avoided cost and nonenergy impacts.</b> The IRP must include an analysis and summary of the avoided cost estimate for energy, capacity, transmission, distribution, and greenhouse gas emissions costs. The utility must list nonenergy costs and benefits addressed in the IRP and should specify if they accrue to the utility, customers, participants, vulnerable populations, highly impacted communities, or the general public. The utility may provide this content as an appendix.</p>	<p>The Portfolio Benefits Assessment is intended to analyze the magnitude and type of benefits provided by a given portfolio to help inform resource selection of the preferred portfolio – as requested by Commission staff and stakeholders.</p> <p>Customer benefit indicators span a wide range of metrics and often increasing one customer benefit indicator will result in the tradeoff of a different indicator. PSE will use the Portfolio Benefit Analysis tool to correlate specific portfolio compositions with CBI values.</p>

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11/1/22	Sergio Duenas, Western Energy Storage Taskforce (WEST)	The Western Energy Storage Taskforce (WEST) recommends PSE move away from weighting all of the factors considered in the CBI equally. To this end, WEST recommends (1) using a CBI weight of 1.5 for the "GHG emissions" and "SO2, NOx, and PM emissions"; (2) using a CBI weight of 2 for "Jobs"; and, (3) retaining a CBI weight of 1 for all other factors. These modifications recognize the societal and economic benefits of investing in decarbonization without placing an overwhelming onus on emission reductions.	If PSE employs this methodology for the 2023 Electric Progress Report, the CBI indices will not be weighted. PSE intends to rely heavily on stakeholder feedback to develop any future weighting scheme for the CBI indices. PSE is considering several methods to collect stakeholder feedback including: listening sessions, additional drop-in sessions, interviews and surveys.

## Attendees (alphabetical by first name)

- |                     |                   |                      |                    |
|---------------------|-------------------|----------------------|--------------------|
| 1. Aaron Tam        | 7. Bob Edmiston   | 13. Eileen Hannigan  | 19. Kelly Hall     |
| 2. Alondra Regalado | 8. Brian Duncan   | 14. Everly Faleafine | 20. Nina Suetake   |
| 3. Amy Wheelless    | 9. Byron Harmon   | 15. James Adcock     | 21. Rosemary Moore |
| 4. Beth Anne Wroe   | 10. Chuyan Cheng  | 16. Jennifer Snyder  | 22. Sachi Begur    |
| 5. Bill Will        | 11. Court Olson   | 17. Jeffrey Larsen   | 23. Sean Yovan     |
| 6. Bing Tso         | 12. Dennis Suarez | 18. Joel Nightingale | 24. Sho Murakami   |

## PSE Staff (alphabetical by first name)

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|----------------------|---------------------|----------------|
| 1. Alexandra Karpoff | 6. Jennifer Coulson | 11. Zeia Lomax |
| 2. Allison Mountjoy  | 7. Meredith Mathis  |                |
| 3. Brian Tyson       | 8. Phillip Popoff   |                |
| 4. Elizabeth Hossner | 9. Ray Outlaw       |                |
| 5. Kara Durbin       | 10. Tyler Tobin     |                |