

# Resource Planning Advisory Group feedback report

## Meeting details

Tuesday, January 27, 2026, 1:00 p.m. - 4:00 p.m.

Virtual webinar hosted by PSE and facilitated by Triangle Associates

Links to:

- [Presentation](#)
- [Meeting recording](#)

## Feedback

The following records participant questions and PSE responses from the public comment opportunity and comments submitted via online [feedback form](#) or email to [isp@pse.com](mailto:isp@pse.com). Meeting materials are available on the [clean energy planning website](#).

PSE endeavors to provide clarity in responses but subsequent follow-up may be required at times. Please direct any follow-up clarifications to [isp@pse.com](mailto:isp@pse.com).

## RPAG member feedback

### 1. Quinn Weber on behalf of the Washington Utilities and Transportation Commission, February 3, 2026 via [isp@pse.com](mailto:isp@pse.com)

#### General

Please minimize the amount of “yes or no” questions posed to the RPAG. Staff views these questions as reductive and not conducive to feedback or conversation. If they are asked, participants should be prompted to explain in further detail to better contextualize their response.

*Thank you for your comments.*

Staff found the round-robin style questions beneficial to discussion. Staff encourages their use as an engagement mechanism in the RPAG.

*Thank you for your comments.*

## Sensitivities

In addition to all the sensitivities planned to be analyzed by PSE (identified in purple) and all sensitivities required by WAC 480-96, Staff believes that PSE should prioritize the following electric sensitivities. Please note, these priorities are not meant to suggest that they should be the only additional sensitivities analyzed:

- Resource Adequacy:** Staff agrees with RPAG members who emphasized the importance of resource adequacy sensitivities. How will these sensitivities be performed? For example, will an alternative PRM or ELCCs be used?
- Staff believes it may be valuable to add a sensitivity for increasing extreme weather events. How could this be achieved? For example, could this be achieved through a sensitivity that increases the forced outage rate as a proxy for extreme weather events?
  - **Limited Transmission:** Staff agrees with RPAG members' suggestion to run a sensitivity on the electric side for a limited transmission scenario, rather than a no transmission scenario. This limited transmission scenario could aim to represent an increase in transmission project delays and an increase in project cost overruns.
  - **DERs:** Staff agrees that including a sensitivity that changes the makeup of DERs to include V2X and V2G will provide greater context for the availability of those resources in the ISP.

*Thank you for articulating clear priorities. PSE will consider these suggestions along with other feedback received from RPAG members in developing the final list of sensitivities.*

In addition to all the sensitivities planned to be analyzed by PSE (identified in purple) and all sensitivities required by WAC 480-96, staff believes that PSE should prioritize the following gas sensitivities. Please note, these priorities are not meant to suggest that they should be the only additional sensitivities analyzed:

1. Customer bill impact sensitivity
2. RNG
3. Systemwide/Geographic Electrification

*Thank you for articulating clear priorities. PSE will consider these suggestions along with other feedback received from RPAG members in developing the final list of sensitivities.*

Will sensitives be run on electric resources costs (and/or cost curves) to see how changes in resource prices might affect the portfolio selection? For example, if PSE is using conservative resource cost curves as their baseline for the electric resource alternatives, as is indicated by PSE in the modeling feedback memo, a sensitivity could be run using moderate resource cost curves to see how they compare.

*No, PSE is not planning to run alternative resource cost sensitivities. Though it is possible to run these sensitivities, we anticipate that other elements play a larger role in influencing the resource selection, such as our overall need, our peak needs, our clean energy targets, and the regional transmission constraints. We therefore propose focusing on the sensitivities in these areas. We have developed our generic resource cost assumptions with care to capture current and future trends. We have used both publicly (National Renewable Energy Laboratory's Annual Technology Baseline) and privately (Black & Veatch's Technology Assessment developed for PSE in 2024) derived sources of cost assumptions and we further refined these costs using bids from our most recent All-Source Request for Proposals. We presented our cost assumptions to the RPAG on May 15, 2025 and considered feedback in finalizing our costs.*

Staff would like to know more about how the gas and electric models interact. Specifically, it would be good to know how PSE is aligning sensitivities across the gas and electric models, given that PSE has proposed different sensitivities for gas and electric. It would seem that any sensitivity influencing one will naturally influence the other, so how is PSE working to align sensitivities across the gas and electric models, or ensure they interact with each other?

*Sensitivities test various components within a specific area of the ISP to determine the impacts to that area's portfolio. There are instances where there are impacts to both the gas and electric system such as CCA pricing; that specific example is reflected as both gas and electric sensitivities to understand that impact. Assumptions regarding the CCA prices and other inputs that impact both the gas and electric system are consistent across the ISP.*

Staff would like to see a sensitivity for the gas system that tests the effects pipeline constraints on the system.

*This is specifically the analysis PSE performs. For example, in the gas supply/conservation level of analysis, PSE begins with the upstream pipeline constraints based on contracts we have in place today. That includes how storage resources are delivered via existing pipeline contracts. We forecast how loads will change in the future and determine what kinds of resource changes, including changes to contract pipeline capacity or conservation, will be cost effective.*

Staff cosigns Katie Chamberlain’s recommendation to include a large load flexibility sensitivity, in line with the Sylvan Analytics study that came out after E3’s study and pointed to large load flexibility as an option to reduce peak demand. If large loads materialize, it would be valuable to see how that sensitivity influences resource adequacy requirements.

*PSE will consider this sensitivity request along with the other sensitivities that have been suggested. It is important to note that PSE’s load forecast does not include significant growth in large loads. In addition, the Sylvan Analytics study was addressing a study E3 performed for the entire region, not the resource adequacy work E3 did specific to PSE.*

Staff would like to see a low-hydro sensitivity (or sensitivities for hydro variation), where hydro flow rates are adjusted for a hydro system more heavily impacted by climate change (i.e. higher inter-annual hydro variability with more low-flow years, lower hydro flow rates in summer). Does PSE plan to run a scenario to this effect?

*PSE will track this request as a possible sensitivity, but we are not likely to be able to perform it. This would be extremely resource intensive just to study a deterministic case and we know that alternative outcome is far from certain. PSE believes the variability in E3’s resource adequacy work is a reasonable approach to addressing hydro uncertainty.*

Staff understood that CCA sensitivities will be run for allowance costs that are mid, low, and no-CCA, while the reference scenario is based on a high CCA cost. Is this correct? Why is PSE not planning a sensitivity on a higher than reference-scenario CCA allowance price? Staff recommends a sensitivity for CCA costs higher than the reference-scenario CCA allowances costs.

*The reference scenario assumes the ceiling price (high) based on 2025 Price Ceiling Unit Price 2 from Department of Ecology (Ecology) in the CCA workshop the Commission held on September 23, 2025, fixed at \$80 in 2026-27 (RCW 70A.65.160), and then linkage to the 2025 California Air Resources Board’s Ceiling Price (escalated by 5% plus 2.5% inflation). There is no need to assume higher allowance prices in other scenarios or sensitivities because Ecology has stated publicly that allowance prices will not exceed the ceiling.*

## Reference Scenario

Electrification in the reference case – PSE indicated that at the January RPAG that the reference case will include “current” building electrification pilots and whatever else is later proposed for low-income programs funded through CCA dollars. Staff notes that PSE is currently planning to issue a decarbonization specific RFP later this year, with project approval by the Commission occurring sometime in October.

Can PSE please clarify for Staff what modeling assumptions PSE is making for including low-income electrification in its reference case? Additionally, what is informing these assumptions given that the RFP-identified projects won't be known until later this year?

Does PSE also plan to assume some level of electrification for non-low-income residential and small businesses (through CCA-funded dollars) in its reference case? If so, can PSE provide additional detail on the impact of this electrification?

While this current decarbonization RFP will use estimated 2026 auction dollars, PSE will presumably have auction proceeds for the other years leading up to 2030 (PSE's "mid" scenario). Does PSE's reference scenario take into account CCA-funded programs beyond 2026? If it does can PSE provide additional detail on these assumptions and, if not, can PSE summarize why not?

*PSE is developing a memo documenting key assumptions that will be shared with all RPAG members (anticipated spring 2026). PSE will work to address these questions in that memo and suggests a follow-up discussion with staff once that document is complete. Additionally, PSE will make note of these questions as areas of interest for staff as we prepare to share the reference case at the May RPAG meeting.*

Modeling the 2% conservation/10% demand response – Slide 18 of the January RPAG indicates that "2% of conservation and 10% of DR or commercial feasibility" will be included in the reference scenario. In response to Staff's comments on PSE's September Memo, PSE indicated that it "is planning to run a traditional cost-effective conservation run through our gas and electric IRP models in the ISP", with the Commission ultimately deciding the targets at the planning level. PSE reaffirmed this plan at the January RPAG by indicating that the 2% and 10% targets would not be considered "maximums" in the scenarios.

Will PSE's reference case include the statutory targets of 2% and 10% or a lower amount defined by "commercially feasible"? Can PSE clarify what amount of technically and commercially feasible conservation and demand response will be included in the reference case?

The Commission may accept lower levels of achievement if it determines that the targets are neither technically nor commercially feasible. If PSE proposes a "commercially feasible" target in its reference case, what is that estimate of "commercially feasible" based on?

Does PSE intend to include any sensitivities representing different levels of conservation and DR targets? For example, will PSE run a sensitivity for cost-effective conservation, for achieving 1.3% of annual load, 1.5% of annual load, etc?

Staff notes that the Conservation Resources Advisory Group (CRAG) indicated it would further explore this topic in 2026, and PSE reaffirmed this point at the January RPAG. So far, the CRAG has not shared any consultation plans regarding this topic. Can PSE share more about its strategy and timeline for taking CRAG feedback in the remainder of the year to make any potential adjustments to its ISP

model assumptions and sensitivities? Also, can PSE share what the remainder of its RPAG engagement plans are for determining what amount of conservation and DR is appropriate (based on discussions around commercial feasibility)?

*PSE's Conservation Potential Assessment (CPA) defines an upper bound of what is "technically achievable" based on known saturations in the market, customer adoption rates, and other parameters provided by the NW Power Council. This analysis shows that 2% energy efficiency and 10% demand response is not technically feasible and therefore that level of achievement will not be assumed for the reference case. The assumptions for conservation and demand response for the reference case will be addressed as part of the May RPAG meeting.*

*PSE plans to engage the CRAG, likely in March, in discussions around the levels of commercially feasible EE and DR to be considered in further ISP analysis as we work towards development of the ISP preferred portfolio. After CRAG consultations progress on this topic, PSE will have a better sense of what RPAG engagement may look like.*

## Max Customer Benefit Sensitivity

Staff appreciate the regulatory context that PSE provided in setting up the RPAG for engaging on the Maximum Customer Benefit (MCB) scenario. Staff believes that further context around which customer benefit indicators (CBIs) PSE plans to use (or not use) would have further supported conversation. Staff notes that PSE had a similar slide in its June 2024 RPAG meeting. Especially because, as noted during the RPAG, the specific nature of the CBIs impacts how the model operates. Which CBIs will and will not be aiming to maximize in the MCB? For the CBIs that PSE will not be maximizing, can PSE provide a brief explanation regarding why they won't be used? For example, Staff notes that PSE's proposed sensitivities do not address the public health impact from RCW 19.405.040(8) nor CBIs for improved community health.

*The focus of the January RPAG meeting was to invite feedback on which customer benefits (not specifically CBIs) the RPAG suggests being prioritized to maximum customer benefits. As noted in the meeting, the models cannot inherently maximize benefits. Instead, we must indirectly maximize benefits by prioritizing specific resource selection or constraints in the modeling (e.g., forcing additional DERs, prohibiting new transmission). As noted on slide 34, we have heard through feedback four key areas of benefits (reliability, bill impacts, environmental impacts, and customer participation in DER programs). Consistent with past practices, both by PSE and other regulated utilities, and feedback received during and after the RPAG meeting, PSE now proposes to model a single sensitivity with high participation in DER, EE, and DR programs and prohibiting emitting resources to maximize participation and minimize environmental.*

On Slide 24, PSE presented 4 sensitivities that would encompass the MCB scenario. Staff notes that during the June 12, 2024 RPAG, PSE staff presented a sensitivity for a maximum benefit scenario that paired CBIs with various resources and constructed a sensitivity that maximized for DERs, demand response, and conservation together.

Can PSE provide additional insight regarding its decision to move away from having one sensitivity? In its answer, can PSE explain why certain sensitivities can't be mutually exclusive? PSE indicated some challenges in trying to analyze multiple CBIs in one sensitivity and Staff is interested in better understanding those challenges and how multiple sensitivities may better reflect improvements to CBI impacts.

*PSE has adjusted its approach as described above but would be happy to discuss these trade-offs during a future call.*

Regarding the “minimize bill impacts” sensitivity, Staff is unclear what CBI this sensitivity is trying to maximize. Staff notes that PSE has several CBIs for decreasing energy burden. Can PSE provide clarity on which of its CBIs, if any, are intended to impact energy burden? Additionally, can PSE provide further clarity on what CBI is being impacted by removing costs associated with CETA/CCA/SCGHG compliance?

*This sensitivity focuses on minimizing bill impacts, which is a customer priority we have heard repeatedly through our named communities engagement. The CBIs best related to this focus could include the “decrease number of households with a high energy burden” CBI or the “decrease residential arrearages and disconnections for nonpayment” CBI. The intent of this sensitivity is to minimize the bill impacts to customers to the greatest extent possible, even if it's not practically feasible to execute the portfolio. Because we have seen the overall portfolio costs increase under CETA (as seen in the 2023 EPR No CETA sensitivity), and the CCA is a cost adder, we can anticipate costs to decrease in examining a sensitivity without these policies.*

Regarding the “reduce environmental impacts” sensitivity, can PSE provide clarity on why this need be distinct from the other sensitivity, such as the maximize DER one?

*As stated earlier, we believe a multi-sensitivity approach enables us to better understand the trade-offs in maximizing different customer benefits. However, based on feedback we plan to combine our approaches into a single sensitivity that would both maximize DERs, conservation, and demand response while limiting or prohibiting emitting resources.*

Staff believes this method of constructing a sensitivity is in line with Dr. Sifuentes' suggestion at ~2:25:00 of the meeting regarding adding some complexity to the model to see how changes to the model introduce various trade-offs and likely paint a more realistic picture of what it may look like to really maximize customer benefit across different types of customers.

*Thank you for that feedback.*

Staff reiterates the language of the CETA rule adoption order: “Proposed WAC 480-100-620(10)(c) requires utilities to include at least one sensitivity that reflects a maximum customer benefit scenario....While all scenarios should be consistent with the customer benefit requirements in RCW 19.405.040(8), this sensitivity should meet load with resources that result in the highest possible values for customer benefit indicators regardless of cost or other competing considerations. The specific resources that should be maximized within this scenario will depend on the customer benefit indicators and associated weighting factors developed pursuant to proposed WAC 480-100-640(4)(c). As with all IRP sensitivities, the goal of this requirement is to provide information to inform highly discretionary decisions by understanding the tradeoff between different resource decisions. The Commission’s intent in requiring such a sensitivity in WAC 480-100-620(10)(c) is to promote creative thinking and ensure broad consideration of customer benefit opportunities freely and without any competing considerations.” Staff highlights that one of the key aspects of the MCB scenario is to consider sensitivities that maximize the customer benefit indicators for customers regardless of cost.

*Thank you for your feedback.*

Staff is unclear whether PSE is using its 2025 customer survey to inform what should go into a maximum customer benefit scenario.

*PSE uses all available information, including the above referenced survey, DER engagement pilot and outreach, EAG feedback, to understand customer perceptions and priorities. This information informs our approach and, again, is consistent with past analysis by PSE and other regulated utilities.*

Staff echoes Lisa Schwartz’ suggestion to consider resiliency in a maximum customer benefit sensitivity

*PSE will consider this suggestion along with other feedback received from RPAG members in developing the final list of sensitivities.*