Feedback report

RPAG Meeting

Meeting details

- Wednesday, June 12, 2024, 10:00 a.m. - 1:00 p.m.
- Virtual webinar hosted by PSE and facilitated by Triangle Associates
- Links to:
    - Presentation
    - Meeting recording

Feedback

The following table records participant questions and PSE responses from the public comment opportunity and comments submitted via online feedback form or irp@pse.com. Meeting materials are available on the IRP website.

Note: PSE aims to provide clarity in responses but subsequent follow-up may be required at times. Please direct any follow-up clarifications to irp@pse.com.

Updating our resource planning equity approach for 2027

PSE appreciates the thoughtful feedback from RPAG members and the public regarding our equity approach in resource planning. Given the likelihood we will be moving towards filing an integrated system plan (ISP) in 2027 in lieu of the 2025 Integrated Resource Plan (IRP), our equity approach will need to further evolve to better fit a more comprehensive resource planning process. PSE plans to re-evaluate our approach to equity in resource planning leveraging the feedback received this cycle and solicit more feedback on an updated approach for the 2027 ISP.

No.	Date	Interested party	Submitted via	Question or comment	PSE response
1	6/12/2024	RPAG member	In meeting	How is PSE defining community health?	PSE is currently working on identifying a "community health" indicator and is looking to enlist support from the University of Washington to help develop a better indicator and metric.
2	6/12/2024	RPAG member	In meeting	Provide a walkthrough from transmission planners about how PSE is planning to assess reconductoring and other potential methods for expanding existing transmission capacity.	PSE recognizes the value of maximizing existing transmission corridors and evaluates reconductoring when identifying potential solutions to address system capacity needs. It is important to note that there are many types of constraints the system can experience, including thermal limits for lines, or voltage or stability limits for load areas. Reconductoring may increase thermal capacity while not fully addressing other types of constraints, resulting in a reduced capacity benefit. PSE is planning for additional transmission conversations as part of 2027 ISP process.
3	6/12/2024	RPAG member	In meeting	When evaluating decommissioning effects of generic resources, consider Washington state law that requires all solar panels to be recycled.	Thank you for your feedback.
4	6/12/2024	RPAG member	In meeting	In the equity analysis tools, consider weighting criteria to account for some being more impactful than others.	Thank you for your feedback.
5	6/12/2024	RPAG member	In meeting	Refine the equity analysis tools to include metrics that do not overlap or double count.	Thank you for your feedback.
6	6/12/2024	RPAG member	In meeting	Consider adding outdoor air quality as a customer benefit indicator for the gas IRP.	Thank you for your feedback.

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7	6/12/2024	RPAG member	In meeting	Ensure that the metrics used to capture the indicators for the gas IRP fully align between the original category, indicator, and metric.	Thank you for your feedback.
8	6/12/2024	RPAG member	In meeting	Consider including targeted electrification in the resource scoring for the gas IRP.	Thank you for your feedback.
9	6/18/2024	Joel Nightingale	Feedback form	Equity in the IRPs How does (or could) PSE's equity analysis include the disparate impact of voluntary electrification on remaining gas customers, especially those least able to bear that burden? Based on our initial interpretation of slide s 40 and 42, Staff was interested in the prospect of including quantitative generic resource characteristics that would allow the AURORA model to optimize in an equity-informed way. Has PSE explored ways to quantify benefits in a way that the AURORA model can understand (for example, using non-energy impacts that represent customer benefits or costs associated with different resource types)? Staff appreciates PSE's engagement with its various advisory groups and the public to improve the way it addresses equity in its long-term planning. We encourage PSE to continue to iterate on this approach in ways that address feedback from these groups including the issues	PSE anticipates forecasting the impact various planning scenarios might have on both gas and electric customer bills in the ISP, including electrification of gas end uses. The impact of electrification on energy burden can be examined in that context. Regulatory policies related to electrification and low income rate programs will impact energy burden to those that are least able to bear those burdens. PSE has explored methods to incorporate customer benefit and equity considerations into the AURORA long-term capacity expansion model through quantifying monetary value for each benefit or burden. After initial investigations, PSE decided to retain separate modeling processes for equity evaluation and economic resource selection. Separate processes allow for more transparent discussion of the inputs and outputs of each model and the ability to include both quantitative and qualitative parameters in the same equity analysis.

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				discussed in the RPAG about the potential for "double-counting" certain benefits (for example, reliability accounted for in both the equity analysis and the resource adequacy analysis), and the nuance missed in a binary scoring system.	
10	6/18/2024	Don Marsh	Feedback form	Dear PSE IRP team, At the June 12 RPAG meeting, there was a lot of discussion about the Equity Enabling Metrics shown on slide 43 and the Customer Benefit Indicators on slide 60. Many of the questions raised by RPAG members centered around two issues: Do some of the metrics overlap, leading to double counting of some metrics in the final scoring? While a binary weighting system is simple, is it really fair? In my work as a co-founder of a machine learning company, it was often necessary to assess the quality of different methods used to classify large datasets. To improve the efficiency of our algorithms, our company searched for good classifiers to separate datasets into distinct classes. An example of a good classifier might be "Separate people into two sets, those who are younger than 50 and those who are older." A bad	Thank you for your feedback. Please see PSE's response to our evolving equity approach near the top of this document.

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				classifier would produce no meaningful separation, like “Separate people who are younger or older than 150 years.” Obviously, no individuals would be in the older set. We also wanted our classifiers to be unique. If a classifier produces nearly the same output sets as another classifier, it might be posing the same question in a different way. In that case, the classifier should be discarded in favor of a classifier that provides unique insights. We suspect the classifiers in PSE’s metrics/indicators are too highly correlated, producing the uniform results seen on slide 61. Four of the five resources scored within one point of each other, with Natural Gas being the only outlier. Is it truly the case that Energy Efficiency and RNG are indistinguishable from an equity perspective, or is PSE’s methodology too simplistic to detect a difference? It would be useful for stakeholders to see the output sets produced by each of PSE’s metrics. If PSE doesn’t disclose the correlation between the sets created by each metric, stakeholders can do the calculation themselves. We will ask questions if any of the classifiers appear to be too highly correlated.	

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				On the second question regarding binary weighting, we understand why non-binary weighting coefficients are difficult to develop. However, it's not an impossible task to provide an explanation for weighting factors other than 0 or 1. For example, it is obvious that a nuclear plant is much more expensive to decommission than a solar farm. If both are given a score of 0 to indicate a non-zero decommissioning cost, ratepayers may be end up paying a high cost for decommissioning a nuclear facility for no good reason. This is obviously not a preferable outcome for PSE's customers. It is also obvious that some metrics are of greater consequence than others, even though PSE's calculation gives each metric identical consideration. For example, every customer would welcome "increased home comfort," but is that benefit equivalent to the need for "reduced greenhouse gas emissions?" One of these goals is mandated by state legislation, the other is simply nice to have. One is a comfort, and one poses a risk to the continued existence of many species on our planet. Nonetheless, PSE suggests that it is too hard to quantify the difference, so let's simplify by	

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				pretending all the goals are equally important. It would be a tragedy if complexity is used as an excuse to shirk responsibility, morality, and justice. How might we quantify these differences in priority? For one thing, RPAG members and stakeholders should be consulted. Here is a simplified example of how to value the economic benefits of "increased home comfort" vs. "reduced greenhouse emissions." Home comfort is a benefit that can be delivered to approximately one million of PSE's customers. The financial benefit for each customer can be estimated, but it's likely to be worth less than $1,000 per year per customer. Therefore, the total value of the benefit is approximately one billion dollars per year, at most. On the other hand, greenhouse gas emissions lead to the deaths of a significant number of humans per year, not to mention increased mortality of plants and animals. It should be possible to estimate the economic cost of these injuries and deaths attributable to the incremental emissions from PSE and its customers. Once we have cost/benefit estimates for each metric, we can calculate weighting values that reflect the relative magnitudes of the costs and benefits of each metric. A primarily economic analysis may not produce perfect or exact weighting values, but it's better to use estimates	

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				than give up and say every metric is equal. An IRP (or ISP) that uses over-simplistic modeling will be ripe for criticism from environmental and equity groups. Even as we suggest a different method for calculating relative weights for scoring each resource relative to each metric, we wonder if this approach is fundamentally flawed. Other states implement performance based regulations by agreeing on a set of goals and then establishing financial incentives for attaining or surpassing each of the goals. This seems like a more familiar way to balance different needs. For example, when a person decides which car to buy, they don't typically calculate a series of weights for each desired feature and then produce a single equation that tells them what to do. Instead, the customer considers each feature individually. "Do I want to spend an extra $500 for the surround sound speaker system, or should I spend that money on nicer looking hubcaps?" While pondering these questions, I found a 2022 report from the EPA titled "State Energy and Environment Guide to Action: Electric Utility Regulatory Frameworks and Financial Incentives" (https://www.epa.gov/system/files/documents/2022-	

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				08/Electric%20Utility%20Regulatory%20Frameworks%20and%20Financial%20Incentives_508_1.pdf). It was notable that the report stresses the importance of gathering input from all stakeholders, including environmental and community groups. Here is an excerpt: *Environmental advocates*. Environmental groups and other non-governmental organizations are often active participants in electric utility regulatory proceedings because these policies can promote environmental benefits including emissions reductions. They participate in various stages of policy design. *Community advocates.* Organizations and individuals that represent communities most affected by resource cost and pollution can offer insights based on experience with relative merits and burdens of various options a utility regulator may be considering. They can propose and critique policies, identify equity-related concerns and opportunities, and specify benefits and harms to their communities. PSE continues to restrict the participation of individuals and organizations such as the Washington Clean Energy Coalition, which has gained a lot of experience in the development of prior IRPs and is eager to participate in current	

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				efforts. We hope to explain to the Utilities and Transportation Commission the numerous ways PSE has attempted to sideline our participation throughout the IRP process, leading to a less informed and less equitable work product. PSE can and should do better. Finally, if PSE continues to pursue its current approach to equity and customer benefit planning, we request that PSE provide a spreadsheet that allows stakeholders to adjust the weighting of each metric to see how adjustments might alter the scoring of each resource in different portfolios. This will help us make our case for an alternative weighting values if PSE's methodology produces outcomes that are not favorable for ratepayers or the environment.	
11	6/21/2024	Katie Chamberlain and Kate Brouns on behalf of Renewable Northwest and Megan Larkin on behalf of Climate Solutions	irp@pse.com	I. Introduction Renewable Northwest ("RNW") and Climate Solutions thank Puget Sound Energy ("PSE" or "the Company") for the opportunity to comment on the June 12, 2024 Resource Planning Advisory Group ("RPAG") meeting. The June 12 RPAG meeting covered how PSE is incorporating equity into its gas and electric integrated resource plans ("IRPs") and improving upon its approach from the previous IRP cycle. RNW and Climate Solutions	Thank you for your feedback. Please see PSE's response to our evolving equity approach near the top of this document.

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				appreciate the work PSE has put into developing an equity methodology for the IRP. However, as members of the RPAG, we have several concerns with the proposed equity approach—namely, that PSE's current methodology used to evaluate the potential burdens and benefits of generic resources may not advance equity in the energy transition and, consequently, may produce inequitable outcomes. We encourage the Company to narrow its equity assessment to only Customer Benefit Indicator-related metrics, incorporate qualitative assessments, introduce weighting between metrics, and increase granularity into the binary scoring mechanism. We discuss these proposed changes below. II. PSE's approach does not reasonably address Named Communities The Clean Energy Transformation Act ("CETA") aims to ensure that Washington's transition to clean electricity is just and equitable. To that end, electric utilities are required to "[e]nsure that all customers are benefiting from the transition to clean energy through: the equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term	

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				public health and environmental benefits and reduction of costs and risks; and energy security and resiliency."[1] The intent of CETA is to equitably distribute the benefits of the energy transition and to reduce burdens on Named Communities. PSE's energy equity strategy omits the latter, which means that key outcomes are missing from PSE's equity approach. PSE has proposed metrics that counteract this goal and may be construed to address the concerns of predominantly wealthy communities. Without aiming to reduce burdens on the communities that are "highly impacted by fossil fuel pollution and climate change" (highly impacted communities) and communities that "experience a disproportionate cumulative risk from environmental burdens" (vulnerable populations),[2] the Company's approach instead tackles the "burdens" of the clean energy transition at large, which does not advance equitable outcomes for any community in particular. RNW recently attended one of PSE's voluntary all-source Request for Proposal ("RFP") presentations and was struck by the differences in the RFP's equity scoring approach. For RFPs, the Company is proposing a scoring system based on energy justice surveys that address potential projects' impacted populations, economic benefits to Named Communities, public participation plans,	

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				etc. This type of scoring system is rooted in the specific location proposed for each potential clean energy project, and as a result, addresses the equitable and inequitable outcomes of the energy transition. RNW and Climate Solutions support this approach to energy equity and believe it is in line with the intent of CETA. III. PSE's approach to equity in the IRP will not advance equitable outcomes RNW and Climate Solutions appreciate PSE's efforts to continue refining its approach to equity from previous IRP cycles. Advancing equity in the energy transition is complicated and Washington utilities are some of the first utilities in the country to grapple with these challenges. PSE's current proposal for incorporating equity into the IRP contains a three-step process. First, PSE will qualitatively assess the potential burdens and benefits of generic resources using customer benefit indicators ("CBIs") developed in compliance with CETA and other metrics that PSE developed. Second, PSE will score generic resources by equity metrics on a binary scale. Third, PSE will conduct a portfolio benefit analysis to evaluate which portfolios are the most 'equity	

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				enabling' based on the generic resource scores within each portfolio. *A. Assessing the potential burdens and benefits of generic resources* CETA prioritizes an equitable transition to clean energy: all electric utilities, including PSE, must reduce burdens on communities that have borne the negative consequences of fossil energy development and equitably distribute the benefits of the clean energy transition. Assessing the potential burdens and benefits of generic resources is an exercise in evaluating the tradeoffs of different energy resources. Responsive to CETA, PSE developed CBIs through a vetted and thorough process including stakeholder engagement. These CBIs fall into the categories outlined in CETA including energy and nonenergy benefits, the reduction of burdens to Named Communities, public health, the environment, energy security, and resiliency. Because of this, we support an equity analysis that measures equity against these Commission-approved indicators. However, PSE also introduced new "equity enabling metrics" (EEM) in addition to the CETA	

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				CBIs. These metrics include “change in land use/viewshed,” “change in noise exposure,” “community safety,” “decommissioning effects,” “end of life effects,” “wildlife and plant community impacts,” “local energy service provided,” and “sited in a disproportionately impacted community.” While these metrics may be important considerations for the siting of energy resources for PSE, they either do not address equity or are not the right fit for a generic resource equity assessment. In fact, the vast majority of these metrics are counterproductive to equity in the energy transition, as we describe in more detail later. We do agree that the “sited in a disproportionately impacted community” EEM has equity implications, but assessing these implications requires more detailed location-specific and resource-specific information than an IRP provides. This metric should be assessed when that information is available, such as in an RFP. To a varying degree, all energy resources have impacts on the environment and on the communities in which they are located, including clean energy resources. However, it is difficult to assess the ‘equity enabling’ characteristics of a clean energy resource without knowing where a	

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				project is located. Generic resources are not representative of a specific project in a specific location; rather, they serve as a proxy for a resource that could be located in many different places within and outside Washington. This approach makes it difficult for PSE to draw conclusions about who is impacted—that is, which communities may be benefiting from the energy transition and which may be bearing burdens. In other words, the siting EEMs may not advance equity in any meaningful way because the analysis is not connected to place or communities. RNW and Climate Solutions are concerned with the non-CBI metrics PSE has identified to evaluate generic resources. PSE divides 17 metrics (CBIs and non-CBIs) into three categories: global scale metrics, PSE customer scale metrics, and resource footprint scale metrics. We briefly describe some of the questions and concerns we have with specific metrics below: 1. Minimal End of Life Effects: Here, PSE groups all resources with physical structures in the same category. Is PSE taking into account existing Washington laws that require solar panel recycling?	

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				2. Change in Land Use/Viewshed: We do not think this metric advances equity. Viewshed impacts are often used as “NIMBY” (not in my backyard) arguments by wealthier white communities to stop renewable energy or transmission projects. Wealthier communities have more time, money, and resources to make their voice heard when compared to Named Communities who often A) lack the same resources, and B) are concerned with metrics that actually advance or harm equity, such as outdoor air quality and community health. We are concerned this metric is geared towards the concerns of more privileged communities, and is counterproductive to achieving equity in the energy transition. Wind and solar infrastructure located along a rural highway, for instance, may change viewshed but do not have an inequitable impact on Named Communities. 3. Increase Noise Exposure: Noise exposure is often used in the same way and by the same communities as viewshed impacts. 4. Affect Community Safety: How does PSE define community safety? This metric is also dependent on where a facility is sited. For example, battery energy storage systems (“BESS”) sited in an	

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				urban environment pose different risks than BESS sited in a rural environment. 5. Decommissioning Effects: What is the distinction between decommissioning and end of life effects? Under PSE's approach, all 8 EEMs and 9 CBIs carry equal weight. RNW and Climate Solutions have concerns with this as well. For example, the 'Reduced GHG Emissions' CBI is weighted the same as the 'Increase Noise Exposure' and the 'Change in Land Use/Viewshed' EEMs. Each generic resource receives a total 'equity enabling' score based on these combined 17 metrics. RNW and Climate Solutions believe that, if each metric is equally weighted, the total scores for each resource will not represent a holistic or accurate impact on equity. PSE needs to account for the vast differences in import among its equity metrics, both on the scale of who is impacted and the magnitude of that impact. To illustrate how PSE's current equity process could actually exacerbate equity concerns in Named Communities, consider the following example: a rural wind and BESS facility, due to land use/viewshed metrics, is given the same	

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				"equity enabling" score as a gas peaker plant that emits greenhouse gas emissions and local air pollutants. This could result in a gas peaker plant being installed in close proximity to a Named Community, worsening local air quality, and actually increasing total burdens. Although this is an illustrative example, PSE's proposed equity scoring system gives Wind + BESS systems and Peakers the same Equity Enabling Score of 4. It is unreasonable to conclude that the pollution from a gas plant (pollutants that both worsen local air pollution and exacerbate global climate change) is equally 'inequitable' to the change in viewshed from a wind facility. For the reasons outlined above, RNW and Climate Solutions recommend that PSE remove the non-CBI metrics from their equity analysis. We also recommend weighting the CBIs to more appropriately account for the differential impact of these metrics. In the RPAG meeting, PSE commented that they would need to solicit customer feedback on which equity metrics matter more to customers, and therefore should be weighted more in future IRP cycles. We strongly recommend PSE solicit and incorporate feedback on weighting equity metrics from its Equity	

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				Advisory Group (EAG), an established group of equity experts; and potentially the RPAG. b. Scoring generic resources on a binary scale After the qualitative assessment, PSE will then score generic resources on a scale of zero to one against each of the 17 metrics. A score of one means that the resource is equity enabling and a score of zero means it is not equity enabling. For example, a wind facility receives a score of one for the greenhouse gas emission metric since it is a non-emitting resource. While this scoring may work well for the greenhouse gas metric (easily split into emitting vs. non-emitting), many of these metrics do not lend themselves to a simple 'yes' or 'no' solution. Binary scoring is too coarse to capture the differences in resource impacts within each of these metrics. For example, within 'end of life impacts,' everything with a physical structure receives a score of zero. This groups resources like solar energy and small modular reactors together, even though they have very different end of life impacts. Similarly, under the 'community safety' metric, BESS, thermal resources, and small modular reactors are all categorized as zeroes, grouping together resources which cannot reasonably be deemed the same in terms of the risk they pose. This effectively penalizes BESS	

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				which have ever-advancing technology and emergency response systems in place. It is also unclear what 'mitigation measures available v. unavailable' for 'noise exposure' and 'wildlife and plant community impacts' would look like without locational information. In theory, all wind and solar energy facilities have mitigation measures that can be employed to protect wildlife and plant impacts; their effectiveness is determined by site-specific details. Beyond concerns with binary scoring, RNW and Climate Solutions have questions about the scoring of generic resources within two specific metrics. First, for 'Decrease in Frequency and Duration of Outages,' it is not clear as to why solar and wind resources receive a score of zero. The vast majority of outages are caused by disruption to the distribution system from storms, trees and vegetation, and animals, all of which are unrelated to the resources providing power. Second, for 'Increase the Quality and Quantity of Jobs,' it is not clear why utility scale and distributed resources receive a score of zero. Both of these resource categories are associated with job creation, and the Inflation Reduction Act ("IRA") provides additional tax benefits for clean energy	

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				projects that pay workers prevailing wages and employ registered apprentices for construction.[3] Most of these examples draw from the new EEMs, which we recommend PSE not move forward with; but a more granular scoring will also be useful when evaluating CBIs. We recommend PSE use a granular scoring system from 0-10 points, instead of 0-1, to capture the varying degree to which a generic resource can promote equitable or inequitable outcomes. RNW and Climate Solutions have reviewed the 'Draft Equity Enabling Scores for the 2023 Electric Progress Report generic resources'[4] and do not feel these equity scores provide PSE and interested parties with useful information about which resources advance equity. Certainly, demand response and energy efficiency are equity enabling since they reduce costs and risk to volatile energy prices and do not require the buildout of new resources with their potential attendant environmental and health impacts. But beyond that, the picture is less clear. Based on PSE's assessment, peaker plants,[5] offshore wind, small modular reactors, and hybrid clean energy projects (wind and BESS, for example) all receive the same overall equity score. Intuitively, this is not an indication of equitable outcomes.	

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				c. Portfolio benefits analysis The final step is the portfolio benefits analysis, where PSE applies the generic resource equity scores to the resources that were selected in AURORA, resulting in portfolio-wide equity scores. PSE then compares the portfolio-wide equity score to the portfolio cost to support the selection of the preferred portfolio. Comparing portfolios based on a flawed scoring methodology is unlikely to result in the selection of the optimal portfolio and advance equity in the energy transition. IV. Gas System Analysis: PSE's Approach is Lacking *a. Lack of metrics compared to electric equity analysis* PSE's gas IRP is beholden to a different set of laws and regulatory requirements than its electric IRP, and some minor differences between the Company's approach to each are to be expected. However, PSE has misaligned its gas and electric equity analyses while indicating in regulatory filings[6] it intends to move forward with a consolidated Integrated System Plan (ISP). RNW and Climate Solutions think that in line with this	

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				regulatory filing, and because targeted electrification is one of the resources PSE evaluates in its gas IRP, PSE should align its electric and gas IRPs as much as possible, including the equity analyses. Newly introduced "equity enabling metrics" aside, PSE measures eight CBIs in its electric analysis. Each of these indicators is relevant to equity outcomes in gas IRP portfolio selection as well, yet three CBIs are excluded from the gas equity analysis. It is concerning that "reduce[d] energy cost burdens," "improve[d] outdoor air quality" and "improve[d] community health," have no place in the gas equity analysis. Combusting natural gas inside homes creates not just climate pollution, but indoor and outdoor air pollutants that are hazardous to community health. It is also imperative that PSE plan to reduce energy cost burdens as much as possible in its gas IRP process. We strongly recommend that all nine CBIs should be used in the gas equity analysis. *b. Concerns with the appraisal of certain burdens and benefits* Similar to the electric IRP equity analysis, we have concerns around the metrics used to quantify and	

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				compare the equity of different gas resources. It is unclear why targeted electrification, which would improve access to clean energy, receives a "0" under the "Improved access to clean, reliable, energy" indicator. When asked about this point in the RPAG meeting, PSE indicated it was weighing reliability more heavily than the clean energy element of this indicator. We recommend these two factors be weighed equally, and would like to offer some evidence to complicate the narrative that RNG and green hydrogen are reliable resources in this regard. Despite RNG and green hydrogen receiving a "1" for this indicator, there is some evidence that after natural disasters including extreme cold weather events, it takes longer to restore gas lines (which would include access to RNG) compared to restoring electricity[7]. RNG and green hydrogen are also both emerging technologies: while they both can be good solutions for hard-to-decarbonize sectors such as high-heat heavy industrial processes, they are not a cost-effective solution for residential and commercial energy needs compared to electrification. The extent to which RNG and green hydrogen will be produced at scale, will be cost effective, or will be available given competing demand is very uncertain, and	

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				these resources should be considered far from "reliable." We recommend that the scores for targeted electrification, RNG, and green hydrogen be adjusted appropriately with a metric that is more balanced between "reliable" and "clean." Targeted electrification should receive a higher score for its improved access to clean energy, and RNG and green hydrogen should receive a lower score due to the aforementioned reliability concerns. V. Recommendations RNW and Climate Solutions encourage PSE to revise its equity analysis within the IRP. We recommend an approach that blends a quantitative and qualitative assessment to accurately capture the equity impacts that resources can have. Our recommended approach is as follows: 1. Conduct a quantitative assessment of generic resources using weighted CBIs (remove non-CBI metrics) and a higher resolution scoring system (0-10, instead of 0-1). Determine the weighting with the EAG and RPAG. 2. Layer a qualitative assessment on top of the results of the quantitative assessment to evaluate	

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				potential benefits and burdens generically. This would result in a narrative explanation of the tradeoffs inherent among generic resources. Through this analysis, PSE would also be able to make some generalized conclusions about the impacts of different resources based on where they are likely to be sited. VI. Conclusion PSE has heard from engaged parties an interest in assessing the trade-offs of different energy resources and potential portfolios. RNW and Climate Solutions appreciate the Company's attentiveness to addressing equity and incorporating such feedback. However, we maintain that an equity analysis for generic resources should be contained to Commission-approved CBIs and that PSE's new "equity enabling metrics" will not sufficiently reduce burdens on Named Communities. Project siting alone can transform a clean energy project's equity outcomes for nearby communities; we do not think it is appropriate for the Company to penalize or reward technologies with such broad strokes. Similarly, equally weighting metrics which do (air quality CBI) and do not (noise exposure EEM) have a demonstrable impact on human	

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				health will not lead to equitable outcomes. Additionally, a binary scoring system does not leave room for varying degrees of benefit or burden within a single metric. We encourage the Company to rethink its equity approach for the IRP. Specifically, we recommend removing the non-CBI metrics from the analysis, appropriately weighting the CBIs, using a higher resolution scoring system, and layering a qualitative assessment on top of the quantitative assessment of generic resources. RNW and Climate Solutions thank PSE for its consideration of this feedback. We look forward to continued engagement as RPAG members in the 2025 IRP process. [1] WAC 480-100-610(4)(c) [2] RCW 19.405.020 [3] https://www.dol.gov/general/good-jobs/cleanenergyprojects [4] See slide 44 of the June 12, 2024 PSE RPAG presentation [5] It is not clear whether PSE is grouping together natural gas peakers and non-emitting peakers in this category. [6] PSE Petitions UE-240433 and UG-240434 [7] Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation, “Outages and Curtailments During	

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				the Southwest Cold Weather Event of February 1 – 5, 2011" (2011). https://www.ferc.gov/sites/default/files/2020-04/08-16-11-report.pdf	

Virtual whiteboard exercise feedback

Comment	PSE response
Several burdens/benefits cite "change in XYZ" (like "change in noise exposure") whereas others just cite "outdoor air quality". Should include "**change in** outdoor air quality" since some resources will change this. Same for community safety, community health, environmental impacts.	We will continue to clearly define our equity metrics in our resource planning process.
Topics such as "noise annoyance" feel like they could be veering into clean energy misinformation. These topics should be based in rigorous scientific evidence (which I'm sure PSE is considering!)	We agree that our equity metrics should be based on scientific evidence. We will continue to explore equity metrics in the energy sector as published in credible sources. Given this is an evolving field, we anticipate more research and strategies for addressing equitable outcomes in the resource planning sphere will be published as we develop our equity approach for the 2027 ISP. We will continue to stay informed and align our strategies with the latest evidence-based practices and suggestions.
If PSE is only considering DERs, DR, and Conservation for max customer benefit, would recommend some consideration of cost. The function of this sensitivity seems like it will only illuminate the high cost of distorted use of DERs, DR, and Conservation (?).	PSE agrees that maximizing DERs, DR and Conservation will result in a more expensive portfolio. However, tradeoffs are inherent in any resource mix. For example, PSE will also generate a Reference portfolio, which represents the lowest cost portfolio that will comply with all planning constraints. By maximizing DERs, DR and Conservation we will be able to observe the magnitude of equity enabling benefits conferred by these resources in the context of other lower cost portfolios. We can use all that information to develop a preferred portfolio.