Feedback report

RPAG Meeting

Meeting details

- Wednesday, April 17, 2024, 12:00 p.m. 3:00 p.m.
- Virtual webinar hosted by PSE and facilitated by Triangle Associates
- Links to:
 - o <u>Presentation</u>
 - o Meeting recording

Feedback

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

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

No.	Date	Interested party	Submitted via	Question or comment	PSE response
1	4/17/2024	RPAG member	In meeting		The IRP modelling process will use the achievable technical potential and the associated costs of demand-side resources and evaluate with supply resources to determine the economic potential of energy efficiency. This is how the value of saved energy that makes sense to be implemented is determined.
2	4/17/2024	RPAG member	In meeting	Please confirm whether the F22 forecast was used in the 2023 Electric Progress Report.	Yes, the F22 demand forecast was the basis for the 2023 Electric Progress Report.



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3	4/17/2024	Don Marsh on behalf of Washington Clean Energy Coalition	Public comment	Lots of interesting information today, but I have some personal experience regarding PSE's Flex programs. As I have noted previously, I am very excited to participate in these programs. Let me tell you a little about my household. I have two solar panel systems on my roof, one is 14 years old and the other is nine years old. We have an EV in our garage and two EV chargers. We also have two Tesla batteries. We have three heat pumps for HVAC, hot water, and clothes drying. With all that, you might think I'm an atypical customer, and that's probably true. However, at least a dozen people who have visited my home have installed solar panels and batteries with a year, the last one just a few months ago. Some are motivated by financial considerations, while others want to contribute to the well-being of our planet by reducing their carbon footprint. Regardless of our motivations, each of us would be an enthusiastic participant in PSE's Flex programs, but PSE can't accommodate anyone who is on net metering. By ignoring your most committed customers, PSE handicaps the potential of Demand Response by cutting out the significant contributions we could make. Also, it makes it harder for PSE to model future Demand Response. My friends and I are the vanguard of trends that will become more pronounced over the coming decade. PSE really needs to understand this potential to ensure the accuracy of IRP modeling.	PSE electric customers with an AMI meter not participating in Time of Use - Peak Time Rebates are eligible to participate in PSE Flex. If a customer's enrollment is denied, please reach out to the PSE Flex team at Flex@pse.com so they can investigate and resolve your enrollment issue.



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				When will PSE correct this problem? I know these operational details aren't the purview of the IRP Team, but the team should understand why PSE is having these problems, and when they might be resolved so you can get the data you need to produce accurate models.	
4	4/17/2023	James Adcock	Public comment	If you believe utilities at all, the one place where utilities have really fall down in terms of predicting future infrastructure needs is failing to predict and actually build the large transmission lines necessary to bring renewable energy to their actual customer load, even thought we have been screaming at utilities for more than a dozen years that this day was coming. This is no excuse for utilities to not meet the requirements of CETA to be actually 80% clean and delivering power to customer load by 2030. Utilities must stop making excuses and get on with it. I further wish to express frustration with Puget's continued predictions of high peak loads during peak evening hours due to EV load. The EV community and the EV research community and the other utilities dealing with evening load know that this need not be the case and have known so for about a dozen years due to the early work by the EV project, I think it was. Examining actual charging behaviors, namely if utility provides incentives to utility owners not to charge during peak hours, then EV owners simply do not charge during peak hours. For example, some utilities provide the option of a second household meter with separate EV rates which are less expensive off peak and more expensive on peak. Or utilities use time of use pricing and then again EV owners simply do not charge on peak. I am on the peak time of use trial program. I have an EV and guess what, I do not charge on peak. It is really that simple. Some other things are not so easy to move off peak. For example, given that it take	Thank you for your feedback.

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				about 3 hours to wash and dry clothes nowadays it can be hard to plan ahead, and it is hard to plan dinners – that's over use, microwave use etc. is done before 5:00 p.m. But EV have charges on them and EV charging stations have charging times and EVs have storage build into them so moving EV charging off peak is really that simple. I'll leave it there.	
5	4/23/2024	Joel Nightingale (RPAG member) on behalf of Washington Utilities and Transportation Commission staff	irp@pse.com	 General 1. Staff appreciates PSE making Guidehouse & Cadmus available for a thorough presentation of the EV forecast and conservation potential assessment. However, Staff encourages PSE to be cognizant of the amount of content in a given RPAG meeting. There were several questions Staff had hoped to ask during this meeting that we deferred to this post-meeting feedback due to time constraints during the meeting. Not having time to ask those questions during the meeting and engage in the conversation that may have followed makes the meeting less valuable to everyone involved, and is now likely to delay a response to those questions by about a month. EV Forecast 2. The EV forecast highlights the importance of aggressive pursuit of demand response (including managed charging), as is required by CETA (RCW 19.405.040(6)(a)) and now ESHB 1589 (Section 3 (4)(g)). Staff encourages PSE to build on its early DR success to facilitate the shifting of EV loads to off-peak hours, allowing for cheap energy to serve this need, and for delivery system upgrades to be delayed or made unnecessary. Will any of the generic programs PSE plans to model this IRP be designed to influence the 	 Thank you for your feedback. PSE endeavors to budget enough time in each agenda for meaningful dialogue. This is part of the broader Section 3 requirements related to developing and filing an integrated system plan (ISP). PSE looks forward to beginning the transition to the 2027 ISP process when appropriate. Guidehouse did not incorporate any specific policy assumptions that focus on reducing VMT in their analysis. Guidehouse's Base Scenario assumptions on vehicle-miles traveled are informed by a number of sources, including the Federal Highway Administration's Highway Statistics Series, Guidehouse Insight's Fuel Institute report, the Environmental Defense Fund, the Alternative Fuels Data Center, and Oak Ridge National Labs, that provide insights into actual driving behavior. The 30% increase and decrease in VMT for the Aggressive and Conservative scenarios, respectively, was determined to provide insights into how EV energy requirements vary depending on VMT, but was not tied explicitly to any policy that would increase or decrease VMT. For IRP modeling, the important piece is how this will affect demand and load shapes. We are

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				timing of workplace (slide 26, yellow area), multifamily residential (light green), fleet (dark green), or public charging behavior?	looking at a few sensitivities around lower and higher demand around electric vehicle use.
				3. On slide 25, Guidehouse notes the significant impact vehicle-miles-traveled assumptions have on the load and peak demand implications of EVs. Did Guidehouse incorporate any policy assumptions around reductions in VMT to their EV charging and usage assumptions?	5. The slide showing enrollment targets provides an example of how many customers would need to be added to each program year over year, with the exception of Flex Events which is a static number year over year. These enrollment targets were based on pre-HB1589 figures and PSE will be reassessing program types, enrollment goals, and program operations to meet requirements set by HB 1589 after rulemaking is complete.
				4. Given that policies aimed at accelerating EV adoption are sometimes paired with policies targeting reduced VMT, does PSE plan to explore a potential future in which EVs are adopted aggressively, but VMT decreases? While Staff understands that the "Aggressive" EV load forecast scenario is important to show the "worst case" in terms of grid impacts (high EV adoption and high VMT), a scenario with high EV adoption and low VMT may help to inform public policy relating to public transit and other alternative modes of transportation that may ultimately benefit PSE's system and its customers. Demand Response	6. PSE has emergency programs in the C&I portfolio that allows for sub-hour dispatching, however we do not currently have emergency dispatching for the residential sector. The shortest advance notice PSE's demand response programs currently operates within is 60 minutes in the Emergency C&I program. Emergency program parameters are only triggered with an EEA level 2 designation. Commercial and Industrial customers in PSE's peak program have expressed to PSE that with more notice they are able to curtail larger capacities. This aligns with PSE's current use case for DR of system wide demand reduction.
				5. Staff is encouraged by the early success of PSE's new DR programs. How does PSE plan to ramp these programs over time? Are the enrollment rates on Slide 34 "projections" or just indicators of enrollment so far? How is PSE planning for a future in which it needs to meet at least "10 percent of winter and summer peak electric demand" through demand response and demand flexibility as required by ESHB 1589 (Section 3 (4)(g))?	7. PSE performed an analysis to determine updated values for the transmission and distribution deferral benefit for the 2025 IRP. The analysis takes into account the approximate 15 percent increase in construction costs over the last two years and now includes a separate summer T&D value, during which equipment ratings decrease about 25 percent in capacity due to operating constraints. The analysis also leveraged the work from the decarbonization studies that were completed earlier this year.



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				 6. What is the shortest advanced notice that PSE's existing DR programs have? Has PSE explored the benefits of short-notice demand-side programs to support balancing/ramping/frequency response needs? Staff notes that PacifiCorp offers commercial/industrial DR programs that provide as little as no notice and up to 60-minutes notice that may be worth exploring for PSE (LINK: Pacific Power Demand Response Enel X). CPA Results 7. Staff requests more information about the updated T&D deferral value (slide 69). Was this change the result of an input/assumption update, an update to PSE's methodology, or just adjusting the previous value for inflation? What drives the discrepancy between the winter and summer value? 	 8. No, this does not represent a change in the underlying measure cost assumptions for lighting controls from the prior IRP. Both IRP cycles based the costs on the Northwest Power and Conservation Council data sets. As noted in the presentation, economic global assumptions were updated as part of this IRP related to discount rates, line losses, and adjusting to 2026 dollars (inflation) also can contribute to higher costs as compared to the prior IRP. With that said, both IRPs had lighting controls that had higher costs as compared to linear LED measures and both IRPs had lighting controls in higher cost bundles as compared to linear LED measures. 9. The reference case presented did not include ESHB 1589, Section 8. PSE and Cadmus are currently evaluating the impact on the natural gas potential.
				8. Cadmus mentioned during the presentation (at slide 57) that while lighting controls represent a lot of commercial conservation potential, they have a high cost and may not be picked up as economic in the IRP modeling. Does this represent a change in cost assumptions from the previous IRP cycle? If so, what factors contribute to this higher cost? (Slide 57)	10. PSE and Cadmus are currently working to develop this suggested \$/kW alternative bundling. It will be used as part of a scenario.11. Please see our answer to #2 above.
				9. How does this CPA incorporate the requirements of ESHB 1589, Section 8, into its assumptions of availability of conservation potential? Do natural gas appliances or equipment appear in the potential beyond January 1, 2025? Do hybrid heat pumps appear in the potential beyond January 1, 2031?	





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				10. Staff has asked in the past (during the 2023 IRP cycle and in previous RPAG meetings) about the traditional bundling methodology (bundling by \$/kWh) and the possibility that this method may miss conservation that would be cost-effective if bundled by \$/kW. Cadmus's slides did not show this alternative type of bundling, so Staff would like to confirm: is PSE still open to performing an analysis that includes a comparison of these two methods (bundling by cost per energy vs. bundling by cost per capacity)? PSE pointed to the low cost of renewables as one of the reasons for less energy efficiency resulting from the 2023 Electric Progress Report, but with high (and rising, per slide 69) T&D avoided costs and high- cost generic peaking resources (alternative fuel peakers, batteries, etc.), Staff is concerned that the traditional bundling methodology may not sufficiently capture all cost-effective energy efficiency, as required by the Energy Independence Act (19.285 RCW) and the Clean Energy Transformation Act (19.405 RCW).	
				11. Looking to the future, PSE will be required to "achieve two percent of electric load annually with conservation and energy efficiency resources," unless the commission determines that it is not "technically nor commercially feasible" (ESHB 1589 Section 3 (4)(e)). How is PSE incorporating this requirement into this IRP? Will any programs need time to ramp up prior to the two percent requirement?	



