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***By Web Portal***

State of WASH.

Amanda Maxwell  
 Executive Director and Secretary  
 Washington Utilities and Transportation Commission  
 621 Woodland Square Loop SE  
 Lacey, WA 98503

UTIL. AND TRANSP.

COMMISSION

**Re: Puget Sound Energy's Comments on Proposed Washington Cost-Effectiveness Test for Distributed Energy Resources, Docket UE-210804**

Dear Ms. Maxwell:

Puget Sound Energy ("PSE") respectfully submits these comments in response to the Washington Utilities and Transportation Commission's ("Commission") Amended Notice of Opportunity to Comment, issued in the above-captioned docket on December 12, 2022 ("Notice"). The Notice solicits comments from interested persons on the proposed Washington Cost-Effectiveness Test for Distributed Energy Resources (Straw Proposal), which was issued on November 7, 2022. PSE appreciates the opportunity to provide these comments.

**Responses to Notice Questions**

- 1. Are changes to the current cost-effectiveness methods used by Washington investor-owned utilities and Commission standard practice necessary to ensure consistent evaluation of DERs? If yes, is a jurisdictional specific test necessary or is there another standard test that could be adopted that would appropriately evaluate DERs applying the Commission's policy goals?**

Yes, changes to existing practices may be necessary to ensure the standardized evaluation of distributed energy resources (DERs) in Washington. Consistent with Commission rules, PSE currently uses the modified Total Resource Cost (TRC) test to evaluate energy efficiency programs. The modified TRC test is balanced, clear, and can be used to evaluate DERs other than energy efficiency. However, it was not designed with many of Washington State's more recent energy policy goals in mind (e.g., electrification of space heating and transportation).

In PSE's 2021 Clean Energy Implementation Plan (CEIP), PSE incorporated a version of a Societal Cost Test (SCT) to evaluate distributed generation, demand response, and distributed storage programs. The SCT and the modified TRC test are similar in many ways, but the SCT included in PSE's 2021 CEIP incorporates minor differences in the discount rate and application of the 10 percent conservation adder. PSE also adheres to additional Commission cost-

effectiveness guidance for transportation electrification, which was issued in Docket UE-160799.<sup>1</sup> Against this backdrop of multiple DER evaluation frameworks, PSE believes changes to ensure a standardized evaluation framework would provide considerable benefits.

Technically, a new jurisdictional cost test is not *necessary* to achieve the State’s policy goals. The Commission could provide guidance to quantify and monetize policy goals and further modify the TRC test. A supplementary equity analysis could also be developed to incorporate relevant qualitative impacts determined by the Commission and interested persons to be relevant. However, adopting a new jurisdictional-specific test may be preferable to forcing an existing test to account for the multiple new impacts that it was not initially designed to include.

Under any approach, PSE emphasizes the need for consistency, balance, transparency, and accountability. Customers should have a clear picture of how policies are being achieved, as well as their costs and benefits.

#### **Utility System Impacts – Tables 3 and 4 in the straw proposal**

### **2. General feedback on electric utility system impacts and gas utility system impacts.**

PSE agrees with the direction of the utility system impacts included in the Straw Proposal. There may be some fine tuning of specific impacts during Phase 2, but PSE believes standardizing the evaluation of impacts across utilities (to the extent feasible) will be beneficial. As noted below, however, PSE emphasizes the need for the Commission to examine further the impacts of Risk, Reliability, and Resilience and to provide additional guidance regarding how those impacts should be defined, measured, and evaluated.

### **3. The definition of the Environmental Compliance utility system impact used in the straw proposal is “compliance costs associated with environmental regulations; net of those already embedded in Energy Generation.”**

#### **a. How should the environmental compliance impact be defined for Washington State?**

PSE’s current approach to incorporating the costs of environmental compliance relies on the social cost of greenhouse gases (SCGHG). PSE applies the SCGHG as a cost adder in the electric Integrated Resource Plan portfolio modeling process when considering resource additions. The SCGHG cost adder is included in electric planning decisions as part of the fixed operations and maintenance costs of a resource, but not in the variable operational dispatch costs of any resource. The SCGHG is also applied to unspecified market purchases of electricity and to thermal resources using emitting fuels. Additionally, the SCGHG is applied as a commodity price in natural gas integrated resource planning process for the planning of energy efficiency, consistent with state laws and regulations.

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<sup>1</sup> See Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services, Docket UE-160799 (June 14, 2017).

**b. Are there particular impacts under this category that need to be discussed in more detail?**

It may be helpful to discuss Washington’s Clean Fuel Standard law, which requires fuel suppliers to gradually reduce the carbon intensity of transportation fuels to 20 percent below 2017 levels by 2034.<sup>2</sup> Under this program, PSE sales of electricity for charging electric vehicles would generate credits that could be sold. Rules for this program are still being developed, but the generation of these credits could be viewed as a benefit flowing from PSE’s installation of electric vehicle charging equipment.

Also, it may be difficult to apply environmental compliance impacts to demand response resources. Frequently, demand response resources represent a shift in load rather than additional non-emitting generation. As a result, the Commission and interested persons would need to develop an average annual load shifting marginal emission rate change to incorporate the environmental compliance impacts of demand response.

**c. For each utility, what Environmental Compliance impacts are embedded within other impact values and where are they accounted for?**

PSE looks forward to discussing this question during workshops to better understand what environmental compliance impacts that may be relevant to this question.

**4. The definition of the Renewable Portfolio or Clean Energy Compliance utility system impact used in the straw proposal is “Compliance costs associated with meeting Washington State’s clean energy standards.”**

**a. How should the environmental compliance impact be defined for Washington State?**

PSE interprets this question as asking how the “Renewable Portfolio or Clean Energy Compliance” impact should be defined, not “Environmental Compliance.” PSE views this impact as accounting for compliance with the Clean Energy Transformation Act (CETA). As such, PSE submits Clean Energy Compliance should be based on the difference between a baseline portfolio scenario (with no generator emission restrictions) and costs associated with a portfolio that meets CETA’s clean energy compliance goals, similar to how CETA’s two percent cost cap is implemented under CETA.<sup>3</sup>

This question and the related impact appear to be focused on CETA, Washington State’s clean energy standard, However, PSE also questions whether costs associated with compliance with the Climate Commitment Act should be included here or elsewhere.

**b. Are there particular impacts under this category that need to be discussed in more detail?**

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<sup>2</sup> See RCW 70A.535.

<sup>3</sup> See WAC 480-100-660.

As electric utilities rely increasingly on variable energy resources to comply with CETA, additional capacity and ancillary services will also need to be procured to balance and integrate the higher saturation of variable energy resources. The costs associated with these additional ancillary services may be deemed additional Environmental Compliance or Clean Energy Compliance impact costs relevant to this category. However, determining how to directly attribute those additional costs may be a complex endeavor, so additional discussion, and guidance from the Commission, may be necessary to create a standardized framework.

**c. For each utility, what Renewable Portfolio or Clean Energy Compliance impacts are embedded within other impact values and where are they accounted for?**

Currently, no Renewable Portfolio or Clean Energy Compliance costs are embedded within other impact values. And costs associated with compliance with Washington's Renewable Portfolio Standard are included within the costs of complying with CETA

Non-Utility System Impacts

**Other Fuels** – Table 5 in the straw proposal

- 5. General feedback on other fuel impacts.**
- 6. What are the implications of including, or not including, other fuel impacts in a primary cost-effectiveness test?**

For both questions five and six, PSE notes that for electric vehicle charging programs to be deemed cost-effective, it is critical to include the benefits of avoided emissions from internal combustion engines and the host customer fuel cost savings associated with electric transportation.

**Host Customer Impacts** – Table 6 in the straw proposal

- 7. General feedback on host customer impacts.**

PSE reiterates the need for Commission guidance and standardization of harder-to-quantify values, specifically those where (1) the valuation methodologies may vary significantly dependent on the chosen method and (2) there is little or no variance in the values between utilities. In situations where there are unique differences between utilities, it would still be beneficial to have a standard methodology that each utility could use to calculate their unique value.

- 8. Are there particular impacts under this category that need to be discussed in more detail?**

PSE believes it would be helpful to discuss the following impacts in more detail during Phase 2:

- *Risk, Reliability, and Resilience*: PSE believes additional discussion of these impacts is necessary. Currently, PSE is using a value for Reliability based on a Lawrence Berkeley National Lab study<sup>4</sup> to evaluate the economic loss from power outages and assess the benefits of potential DER programs for customer-sited energy storage devices. However, the Reliability values included in this study represent averages of the responses provided.<sup>5</sup> A statewide (or regional) value provided by the Commission may help avoid subjectivity.
- *Asset Value*: The Straw Proposal definition of asset value relates to the increased value of a home or business asset resulting from DER installation. Because this value is highly subjective depending on the methodology chosen, PSE would support the Commission selecting a study or baseline to avoid wide discrepancies in estimates.
- *Most of the harder-to-quantify host NEIs*: For many of the Host Customer NEIs, each individual utility could produce unique valuation methods, but again, the values could vary significantly depending on the chosen methodology. PSE therefore sees value in discussion and standardized Commission guidance in these areas.

**9. Low-income host customers experience the same categories of impacts, but often at a higher magnitude, as non-low-income host customers. Low-income customers are included as a separate category to allow non-energy impacts (NEIs) to be evaluated differently for these customers. Highly impacted communities and vulnerable populations (named communities) are likely to experience NEIs differently as well. Should named communities be included in this separate category? Or, should named communities be evaluated as a separate, third category?**

Named communities should be evaluated as a separate category from low-income host customers. Named communities are distinguished geographically, and while some but not all proposed impacts may be applicable to named communities, treating them the same as low-income customers could potentially create a disconnect between need and additional services provided. If metrics for named communities are developed and provided by the State, separate analyses for named communities and low-income customers could be completed without unreasonable complication.

**Societal Impacts** – Table 7 in the straw proposal

**10. General feedback on societal impacts.**

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<sup>4</sup> See “Updated Value of Service Reliability Estimates for Electric Utility Customers in the United States,” LBNL and Nexant, Inc., Jan. 2015, available at: [LBNL-XXXX \(lbl.gov\)](#).

<sup>5</sup> The study now includes 34 different datasets from surveys fielded by 10 different utility companies between 1989 and 2012.

The investor-owned utilities have proposed Customer Benefit Indicators in their Clean Energy Implementation Plans, and PSE notes that many of those indicators may overlap with the proposed Societal Impacts in table 7 (e.g., Economic and Jobs, Public Health). It will be important to distinguish the role of the cost-effectiveness test being developed through this Commission-led process and the role of customer benefit indicators.

**11. The definition of the GHG Emissions societal impact used in the straw proposal is “non-embedded GHG emissions. Should be incremental to values included in utility system impacts.”**

**a. How should the GHG Emissions impact be defined for Washington State?**

PSE does not have a proposed definition at this time, as this topic requires further discussion.

**b. What impacts does the SCGHG include that should not be double counted elsewhere?**

PSE is not certain. The SCGHG is a static, annual value calculated nationally. Additional discussion may be necessary for PSE to provide a more detailed response.

**12. The definition of the Other Environmental societal impact used in the straw proposal is “other air emissions, solid waste, land, water, and other environmental impacts.”**

**a. How should the Other Environmental impact be defined for Washington State?**

PSE does not have a preferred definition for this impact; there are variety of impacts that could be added here. PSE suggests creating a list of potential impacts and then limiting those that are to be included in the broader utility analysis to only those that have a “material” impact.

**b. How should this be defined to ensure there is no overlap with other impacts, especially the Public Health societal impact or the Environmental Compliance utility system impact?**

Ensuring that there is no overlap is dependent on the measures chosen. PSE suggests treating this impact like other material measures—i.e., items with de minimis or immaterial impacts are not included.

**13. The definition of the Public Health societal impact used in the straw proposal is “health impacts, medical costs, and productivity affected by health.”**

**a. How should Public Health impact be defined for Washington State?**

**b. How should this be defined to ensure there is no overlap with other impacts, especially with any host customer impacts or the Other Environmental societal system impact?**

The inclusion of Public Health societal impacts in utility evaluation frameworks is both necessary and important. However, utilities need guidance from the Commission to avoid potential conflicts with related efforts to account for these and other societal impacts in regulatory processes, such as in clean energy implementation plans under CETA.

In PSE's case, initial customer benefit indicators have been developed and proposed following robust collaboration with PSE's equity advisory group and other interested persons. To the extent that additional societal or public health impacts are to be incorporated in a new primary cost-effectiveness test, PSE would like to ensure there is no double counting or conflict between those impacts and the customer benefit indicators included in the CEIP. Formal Commission guidance in this area may therefore be necessary.

**14. The definition of the Energy Security societal impact used in the straw proposal is "Reduction in imports of various forms of energy to help inform the goals of energy independence and security."**

- a. How should the Energy Security impact be defined for Washington State?**
- b. How should this be defined to ensure there is no overlap with other impacts, especially with Reliability and Risk utility system impacts?**

PSE believes that the topic of Energy Security should be discussed further. Reducing cost volatility from imported energy could indeed be a benefit worth considering, however, calculating this value will be tremendously complex. Further, PSE notes that reducing energy imports does not necessarily lead to "energy security." The availability of resources across geographically diverse areas can increase energy security and enhance resilience during extreme weather events, which may affect some regions but not others. Additional discussions may therefore be necessary to ensure this term is not being confused with Reliability or Risk. The Commission (or the State) could consider hiring a consultant to evaluate this impact and ensure applicability across utilities.

**Risk, Reliability, and Resilience – pages 15 through 16 of the straw proposal. Three impacts that Staff anticipates will require additional workshops to discuss appropriate definitions and applicability are Risk, Reliability, and Resilience. For each impact, please review the multiple definitions provided and answer the following questions:**

- 15. What definition captures the appropriate utility system impact? If not identified in the straw proposal, please provide any available references to how this definition has been used by a utility.**
- 16. What definition captures the appropriate host customer impact? If not identified in the straw proposal, please provide any available references to how this definition has been used by a utility.**
- 17. What definition captures the appropriate societal impact? If not identified in the straw proposal, please provide any available references to how this definition has been used by a utility.**

**18. Are there any questions or concerns that should be discussed in a workshop?**

Overall, PSE believes the value items included in the Straw Proposal are a good start to addressing the impacts of Risk, Reliability, and Resilience, but that additional discussion in future workshops is required. Capacity factors, price hedges, reduced outage costs, and protection from price spikes are all relevant considerations. However, some of these impacts may need to be defined on a statewide basis rather than at the individual utility level, with values determined by the Commission or a Commission-led process. PSE believes this direct Commission involvement is necessary due to the wide range of potential valuation methodologies.

**Application and Adoption of the WA test**

**19. General feedback on the straw proposal Section 3: Application of the WA Test and Appendix 3.**

The information provided in tables 8 through 12 of the Straw Proposal is reasonable. Except for the NEIs and societal impacts (which PSE hopes is the subject of standardized Commission guidance in the future), most of these impacts are already included in PSE's cost-effectiveness modeling.

Regarding electric vehicles, PSE again notes that electric vehicles are an appliance to increase load, not reduce it. As such, the only benefit that appears relevant is the Fuel Switching value in Table 5 for host customer benefits. In PSE's experience, however, that is not enough of a benefit to offset all costs of an electric vehicle program and infrastructure. In most cases, the utility's role in this area is to expand electric vehicle adoption and bolster the market by making investments in areas that are otherwise underserved. If the market is not installing charging equipment in a certain location, utilities can develop programs to address policy goals other than profit or revenue stability, such as comfort, range anxiety, expanding the charging network, and transportation electrification. All of this is to say that electric vehicle programs can be different in nature, scope, and purpose, so the application of the Straw Proposal may need to be refined further to account for the fact that some DER programs present unique costs (e.g., increased Clean Energy Compliance costs where new load is added).

**20. After incorporating these comments and discussion from workshops 4 and 5, Staff anticipates being able to recommend utilities keep the status quo concerning cost-effectiveness of DERs, move to another standard test, or move to a WA Test. If Staff recommends utilities change current practice, should the recommendation be formal or informal? Is there a preferred time frame for a formal recommendation?**

PSE would prefer formal guidance from the Commission, irrespective of which path Commission Staff recommends. Formal guidance will help with ongoing DER evaluation processes and provide a roadmap for future success. To the extent necessary, the Commission could also provide formal or informal guidance based on technology type. For example, among DER types, energy efficiency benefits from the most robust evaluation framework already given



Washington's leadership in this area. However, more formal guidance from the Commission may be necessary to help utilities evaluate distributed generation and storage technologies.

The timing of any formal recommendations should enable the filing of future Clean Energy Implementation Plans under CETA. PSE and the other investor-owned utilities have submitted their first plans in 2021, which either are pending before the Commission or in progress. Therefore, to the extent a new cost-effectiveness test is determined to be the path forward, the recommendation should allow utilities time to implement them into the clean energy planning process, which involve significant public participation elements and timelines.

The timing of the Commission's guidance could also depend on the duration of Phase 2 of this proceeding and any other phases. To the extent that utilities can calculate and provide values themselves for specific impacts, a faster timeline may be appropriate. However, an extended timeline may be necessary for values requiring collaborative work with the Commission and other interested persons. For PSE's part, most of the benefit-cost analysis framework included in the 2021 Clean Energy Implementation Plan already aligns closely with the Straw Proposal.

Finally, PSE notes that a supplementary test or analysis will be necessary to incorporate equity, and that supplementary analysis will incorporate more qualitative impacts and measures not monetized for the primary test. PSE notes that it has already begun this process with the incorporation of Customer Benefit Indicators in the 2021 Clean Energy Implementation Plan. These indicators vary by utility, and PSE's proposed indicators include metrics for jobs created and equity. PSE therefore recommends that if a second test is necessary, the Commission should consider the use of the Customer Benefit Indicators as that second test, rather than develop another set of metrics which might be duplicative of or confused with the Customer Benefit Indicators. PSE appreciates the initial discussion of equity at the December 2022 workshop; however, PSE requests additional guidance on how a second equity-focused test should be applied and considered relative to any primary test.

## **Phase 2**

**During the past year, Staff has worked with interested parties, through the NSPM framework, to determine *which* DER costs and benefits to include in a potential WA Test. In 2023, Staff intends to continue a second phase of this process to determine *how* to calculate the values of costs and benefits using the Methods, Tools & Resources Handbook that is a companion document to the NSPM.**

- 21. Please describe the ideal process for Phase 2. What mix of comments and workshops makes the most sense? Would a standing monthly workshop be preferred or does scheduling workshops as needed make more sense? Should the practice of holding workshops to two hours be preserved or are there topics that should be given additional time?**

Recognizing the volume of complex, technical work that lies ahead in Phase 2, PSE would prefer a transparent, direct, and collaborative approach. Standing monthly workshops

appear to make sense. However, during Phase 2 it will become increasingly important that materials for each workshop are provided as far in advance of the workshop as possible to enable informed participation. In an ideal scenario, Commission Staff or the consultant should provide tangible materials, data, and proposed methodologies before each workshop, as this would allow for internal meetings and preparation before the workshops.

Then, collaborative discussion and identification of areas of consensus and disagreement, and potential alternatives, could take place during the workshops.

Finally, following each workshop, the Commission should invite formal written comments, which would be submitted by the subsequent workshop. PSE believes this structured and transparent approach would maximize informed participation and allow adequate space in workshops for organic discussion. Ideally, because of the complex nature of certain topics, some of these workshops might also occur in-person.

**22. Staff will review previous comments in this docket to identify important topics for workshops. Are there topics that should be addressed that have not been brought up previously? What topics that have been brought up be given the highest priority?**

As noted in PSE's prior comments, additional discussion of how electrification is to be evaluated should be a priority for Phase 2. Electrification measures do not pencil out as cost-effective because of the increased electric demand associated with switching. As the Straw Proposal notes, if a DER increases electricity demand (e.g., electrification), it will also require additional renewable purchases and therefore increase Clean Energy Compliance costs. And in some cases, this Other Fuel is provided by the relevant utility, but not in all cases. PSE therefore supports Staff's intent to include the opportunity to comment and focused workshop time to address electrification during Phase 2.

Additionally, PSE believes the impacts of Risk, Reliability, and Resilience require further discussion and guidance from the Commission.

**23. On page 21 of the straw proposal, Synapse proposes next steps to begin Phase 2 of this investigation. Please provide feedback on this proposal.**

PSE agrees with Synapse's proposal and looks forward to moving directly to Phase 2. Overall, the Straw Proposal appears to be a good starting point for further discussion in Phase 2. Areas of ambiguity can then be addressed in the more collaborative workshop setting, where interested persons can ask questions and begin working on the direct application of value development.

Many of the questions in this Notice regarding specific impacts highlight the need for additional discussion among interested persons and, in some cases, guidance from the Commission. There are best practices that can be leveraged, but more than anything else, PSE and other utilities are looking to the Commission for standardized, formal guidance in many areas, especially those where there are qualitative or subjective considerations at play in DER evaluation.

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Washington Utilities and Transportation Commission

PSE appreciates the opportunity to provide comments. Please contact Brett Rendina at (360) 294-9558 for additional information about these comments. If you have any other questions, please contact me at (425) 456-2142.

Sincerely,

*/s/ Jon Piliaris*

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