

**EXH. KKD-__Xr
DOCKET UE-210795
2022 PSE CEIP
WITNESS: KARA K. DURBIN**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of
PUGET SOUND ENERGY, INC.
2021 Clean Energy Implementation Plan

Docket UE-210795

REVISED

EXHIBIT TO THE CROSS-EXAMINATION OF

KARA K. DURBIN

ON BEHALF OF NW ENERGY COALITION AND FRONT AND CENTERED

January 27, 2023

November 12, 2021

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

*Re: NW Energy Coalition's Comments on Puget Sound Energy's Draft Clean Energy
Implementation Plan (Docket UE-210795)*

Dear Ms. Maxwell:

The NW Energy Coalition ("NVEC" or "Coalition") appreciates the opportunity to comment on the draft Clean Energy Implementation Plan ("CEIP") submitted by Puget Sound Energy ("PSE") on October 15th, 2021. While the Utilities and Transportation Commission ("UTC" or "Commission") did not issue a Notice of Opportunity to File Written Comments in this docket, we submit these comments hoping that they will help inform the development of the Final CEIP, to be filed with the Commission on December 17th, 2021. We have also provided these comments directly to the company.

The Coalition is an alliance of more than 100 organizations united around energy efficiency, renewable energy, fish and wildlife preservation and restoration in the Columbia basin, low-income and consumer protections, and informed public involvement in building a clean and affordable energy future. In addition to these comments, we have filed multiple comments on PSE's 2021 Integrated Resource Plan (Dockets UE-200304/UG-200305), and NVEC staff participates as members of PSE's IRP Technical Advisory Group, Conservation Resources Advisory Group, and Low-income Advisory Group. NVEC has also observed the Equity Advisory Group meetings. We joined with the Public Counsel Unit of the Attorney General's Office, The Energy Project, and Front and Centered in submitting a Joint Proposal on Customer Benefit Indicators. That proposal was originally filed on July 30th, 2021 in Docket UE-210297, and refiled in this docket on November 5th, 2021. These comments are in addition to comments we have already submitted and to the feedback provided by NVEC staff at advisory group meetings.

We appreciate the work of PSE staff and the members of PSE's Equity Advisory Group (EAG), Integrated Resource Plan Technical Advisory Group (IRPTAG), Low Income Advisory Group (LIAG) and Conservation Resources Advisory Group (CRAG), which have committed a significant amount of time and effort into developing and reviewing the CEIP over the past months. We offer these comments on the Draft CEIP in the spirit of improving the final product, and in a good faith effort to help PSE fulfill the intent and purpose of CETA – to achieve an equitable transition to a 100-percent clean electricity grid.

General Comments

Since this is the first time CEIPs have been developed by Washington utilities, we expect the first efforts to be the springboard for clarification, refinement, and improvement. A CEIP should be a relatively short, concise, stand-alone document that clearly delineates the specific actions a utility will undertake over the four-year implementation period. It is not intended to be a mini-integrated resource plan weighing many options, but an explanation of the specific actions that will be undertaken in the short term, just the next four years.

While a CEIP is informed by the information in the Clean Energy Action Plan (CEAP), it is not limited to the information in the CEAP. In this case, the CEAP was prepared long enough in advance of the CEIP that more up-to-date information and data should be incorporated and reflected in the CEIP. In the future, it would be appropriate for PSE (and all utilities) to conduct its CEIP planning concurrently with its Integrated Resource Plan (IRP) and CEAP, to avoid this issue.

Supporting details should be either in the CEIP or electronically linked. As much data as possible should be easily available in the CEIP and the methodologies clearly explained so stakeholders can understand and vet PSE's process and results. The reader should not have to jump between the CEIP, the Biennial Conservation Plan (BCP), the Integrated Resource Plan (IRP), and other appendices to get a full picture of PSE's CETA compliance plan. All relevant information should be distilled and contained in the CEIP, with the other sources serving as supporting documentation in appendices.

Summary of Concerns

In general, we are disappointed to see that PSE's Draft CEIP falls short in some important respects of both the minimal requirements and our overall expectations for this first round of CEIPs. We recommend that significant changes be made to the document to ensure that the information is clearly presented and supported by analysis, and that the Final CEIP meets the requirements of [WAC 480-100-640](#) and [RCW 19.405.060](#).

The rules at 480-100-640 are very clear as to what must be included in a CEIP. There are significant shortcomings in the draft CEIP relative to the contents. Most notably:

- ***resource costs are unreasonably high.*** PSE did not update its resource cost assumptions for the CEIP. Reasonable resource cost assumptions are necessary in order to ensure that the CEIP contains a least reasonable cost portfolio (WAC 480-100-650(6)(f) and (7)). See the technical memorandum from Moment Energy Insights attached to our comments for further explanation of this issue.
- ***The Social Cost of Greenhouse Gas ("SCGHG") calculation methodology used for the CEIP is flawed.*** NWECC has submitted multiple rounds of comments explaining why the SCGHG should be applied to resource dispatch in the model. See the technical memorandum from Moment Energy Insights attached to our comments for further explanation of this issue.

- ***The CEIP lacks specific actions for Energy Efficiency (“EE”), Demand Response (“DR”) and Renewable Energy (“RE”) resources, as required by WAC 480-100-650(5) and (6).*** Only general categories of kinds of actions are provided, resulting in Appendix L CEIP Programs and Actions Master Table lacking significant required data. PSE has explained that it cannot complete the tables and narratives required by WAC 480-100-640(5) and (6) until the results of the various RFPs have been finalized in mid-2022. This trade-off between submitting a complete plan and waiting for RFP cycles to complete is simply a false choice, and should be remedied in the Final CEIP. The lack of complete information is inconsistent with the intent and purpose of the CEIP, and has the effect of delaying PSE’s implementation of CETA for more than another year. Further, this choice by PSE places the Commission in the impossible position of reviewing a plan without a thorough understanding of those specific actions that should comprise the plan.
- ***Estimated incremental costs cannot be accurately calculated without the specific action and resource cost updates (WAC 480-100-640(7)).*** This information is particularly important if a utility intends to meet the compliance by relying on the 2% incremental cost compliance option at RCW 19.405.060(3)(a), because the Commission will ultimately decide whether the actions taken to comply with the standards in sections 4(1) and 5(1) allow the utility to rely on the 2% incremental cost. This alone will require a thorough understanding of each action, the underlying business case and financial aspects of the action. Instead, it would be appropriate for the first CEIP to include the best information available to PSE for the Commission to consider at the time it is submitted, with the caveat that specific actions can be updated as the various RFP cycles are completed.
- ***Customer Benefit Indicators (CBIs) need improvement.*** PSE applies CBIs in a restricted and convoluted manner, resulting in misleading comparisons and applications that seem to undercut the purpose of those indicators (WAC 480-100-640(4));
- ***CETA’s resource prioritization is not clearly represented.*** RCW 19.405.040(6)(ii) and (iii) clearly identify the order of resource acquisition required of utilities under CETA. First, utilities are required to pursue all cost-effective, reliable and feasible conservation and efficiency resources and demand response, then existing renewable resources, then renewable resources and energy storage *before* acquiring new resources per RCW 19.405.040(6)(ii) and (iii). PSE’s implementation of this provision is not clearly mapped out in its CEIP.

We expand on these concerns and provide recommendations below.

1. **Resource costs and SCGHG**

While the CEIP actions should be “consistent” with the twenty-year IRP and “informed” by the 10-year Clean Energy Action Plan (CEAP), that does not mean the information in the CEIP should be limited to the data from the longer-term plans (See Attached legal memo “Consistent with” in CETA from EarthJustice dated October 8, 2021) To ensure the plan is the least reasonable cost portfolio, the resource costs for the specific actions in the selected portfolio should be updated. In this particular cycle, PSE’s Request for Proposal(s) should have been issued in summer of 2020, so that the most recent cost data would have been available for this CEIP. However, PSE requested and was granted waivers to delay the RFPs until 2021 with results not expected until the last half of 2022. PSE’s generic resource cost assumptions used in its IRP are now seriously out of date, and should be updated in the CEIP with current data from NREL’s 2021 Annual Technology Baseline (ATB) and other publicly available sources for the assessment of the portfolio used in the CEIP. Using up-to-date cost information, even without the results from the RFP, would have significant impact on the resources selected.

We submit with these comments a Technical Memo on costs and how they impact the selected portfolio. With the help of GridLab, NWECC engaged Moment Energy Insights (“MEI”), author of the Technical Memo reviewing PSE’s Renewable Resource Economics, to analyze the cost assumptions and methodology underlying the Draft CEIP.

MEI found that PSE’s capital and transmission costs for renewables used in its Draft CEIP are unreasonably high. Combined, the **excessively high resource costs along with the decoupling of SCGHG from dispatch distorts and masks the signal for PSE to invest in clean resources** (see pages five through eleven of the Technical Memo). Updating resource and transmission costs alone would increase PSE’s 2025 renewable acquisition target from 500 MW to 900 MW (corresponding to a 66% CETA interim target) at similar incremental costs to those that PSE has deemed acceptable in their draft plan. The full memo is attached to our comments, and we present just the summary here:

Variable and fixed transmission costs are unreasonably high: MEI’s analysis of the Draft CEIP revealed that variable transmission costs were vastly overstated – nearly thirty times higher than what they should have been. We raised this issue with PSE, and they confirmed the error and committed to fixing the variable transmission costs and rerunning the relevant models between the Draft and Final CEIP. PSE also confirmed the fixed transmission cost escalation rates were incorrect, and committed to fixing the WA wind fixed transmission costs and rerunning the relevant models to correct the transmission cost issues between the Draft and Final CEIP.

Renewable capital costs are unreasonably high. Using updated resource cost assumptions is foundational to developing an optimized portfolio of clean resources, including EE, DR, RE and RE + storage. Moment Energy Insights found that renewable capital costs in the Draft CEIP are unreasonably high due to calculation errors and outdated cost assumptions and that these high costs have a direct impact on PSE’s incremental cost analysis and the CEIP interim targets. PSE has stated that they plan to update cost assumptions for near-term acquisitions based on the actual costs resulting from the ongoing all-source RFP and to update generic resource costs in

the next IRP. We contend that these costs should be updated in the Final CEIP, consistent with the transmission costs. Since PSE has already committed to re-running the model, it would not be appropriate to re-run the model with out-of-date resource cost assumptions. Waiting until 2023 to correct this would undermine near-term renewable procurement targets for CETA compliance.

the Technical Memo illustrates that updating resource and transmission costs alone would increase the 2025 renewable acquisition target from 500 MW to 900 MW (corresponding to a 66% CETA interim target) would yield similar incremental costs to those that PSE has deemed acceptable in their draft plan. *This is a significant change from the current CEIP portfolio, one that moves PSE towards compliance with the CETA standards more rapidly.*

Recommendations on Costs and the SCGHG

MEI also found the impact of the SCGHG depends strongly on resource costs, and that understanding this relationship of excessively high costs to resource selection is critical for calculating accurate incremental costs associated with CETA. MEI’s Technical Memo explains that, because of the unreasonably high resource costs, it doesn’t matter what methodology PSE uses to apply the SCGHG, the analyses counterintuitively result in no impact on the level renewable resource acquisition, because the price signal is removed by the high resource costs. Since a full accounting of the impact of PSE’s approach is impossible outside of PSE’s model, we strongly support the recommended actions presented in the Technical Memo - that PSE re-run their CEIP models to better align planning with market realities and fully account for the SCGHG in resource planning and CETA incremental cost calculations, and that these changes be incorporated in the Final CEIP.

We recommend that PSE:

- Update resource costs to align with more recent overnight capital cost estimates and fix the variable transmission cost and fixed transmission cost errors identified in this report.
- Re-run the CEIP Preferred Portfolio and No-CETA portfolio with these cost updates.
- Identify whether the SCGHG treatment materially impacts incremental costs by testing the No-CETA portfolio under the alternative SCGHG treatments employed in the IRP (Scenario I and Scenario J).
- If the SCGHG treatment is found to materially impact the amount of near-term renewables added in the No-CETA portfolio, calculate and report out incremental costs for all three SCGHG treatments. Specifically, compare the following portfolios

SCGHG Test	With CETA	Without CETA
1	CEIP Preferred Portfolio with Fixed SCGHG approximation	No-CETA portfolio with Fixed SCGHG approximation
2	CEIP Preferred Portfolio with IRP Scenario I SCGHG treatment	No-CETA portfolio with IRP Scenario I SCGHG treatment
3	CEIP Preferred Portfolio with IRP Scenario J SCGHG treatment	No-CETA portfolio with IRP Scenario J SCGHG treatment

- Based on these updates and a more thorough investigation of the impact of the SCGHG on resource selection and incremental costs, provide updated incremental cost estimates and modify the interim CETA target and resource acquisition targets accordingly.

Other Cost Considerations

There are a number of assumptions carried over from the CEAP into the RFP, such as the large decrease in market reliance from 1500 MW to 500 MW over five years and the inability of the models to choose from a full suite of storage resources in place of “flexible capacity” that skew the resource choice portfolio outcomes.

PSE proposed the reduction in market reliance very late in the IRP process, long after NWECC had pointed out that the volume of transactions for the Mid-C trading hub has fallen by about half in the last five years, due to the effect of the Western Energy Imbalance Market and other factors.

While PSE’s over-reliance on the market for many years is close to a consensus finding, the abrupt shift has not been fully justified, though recent increases in price spikes, general volatility and the recent upward shift in commodity natural gas prices support at least a moderate reduction in the expectation of what the market can deliver, especially during peak periods. But PSE has offered only very limited analysis supporting a two-thirds reduction in the market limit for planning purposes, and the draft CEIP only makes general reference to the IRP finding.

Likewise, the market limits adopted in the IRP led to undervaluation of storage resources in the IRP (and therefore the draft CEIP) which in turn affected valuation for the All-Source RFP, a topic that received extensive discussion and a special technical workshop.

NWECC participated with other organizations in a technical analysis and provided several rounds of informal and written comments¹. While the issue was not entirely resolved, PSE’s consultant, E3, provided several suggestions for improving the analysis that should also be incorporated in the Final CEIP.

Recommendations on ELCC and Market Assumptions

- We urge that the methodological corrections to the Effective Load Carrying Capacity (ELCC) calculations being addressed in All-Source RFP (UE-210220) be incorporated into the Final CEIP as well.

¹ See, for example, Comments of Renewable Northwest, NW Energy Coalition and Rye Development, Docket UE-210220, Puget Sound Energy’s Effective Load Carrying Capability Estimates and Use in the Company’s All-Source Request for Proposals, October 22, 2021

- We suggest that PSE include a more thorough summary of its analysis of market constraints and propose a plan of action for further review of this issue during the CEIP period.

2. Energy Efficiency

The Energy Efficiency specific actions are not included in the Draft as required by WAC 480-100-650(5) and (6). What is listed in Appendix L, CEIP Programs and Actions Master Table, are general *categories* of efficiency programs – residential, commercial, large power user, etc. Each category provides an “energy contribution in MWh” and an “estimated cost”, but it is not at all clear where the program costs that were evidently summed to reach the category sub-totals come from.

A footnote in Appendix L states that conservation “updates” will be provided in the Final CEIP, as the Biennial Conservation Proposal (BCP) was filed the same day as the Draft CEIP. Those updates should detail the specific programs PSE will undertake and provide the information required by 480-100-650(5) and (6). The Final CEIP should also clearly detail what “the New Energy Efficiency” listed in Table 2-1:2022-2025 Interim Target Calculation consists of, since the footnote to that table states the “New Energy Efficiency” does *not* include the updated target from the 2022-2023 draft Biennial Conservation Program. Going beyond the minimum efficiency required by CETA would be a plus for the CEIP. The specific “new efficiency programs”, just like the other efficiency programs and actions, should be thoroughly described per WAC 480-100-650(5) and (6), and added to Appendix L, as there is no mention we could find of “New Energy Efficiency” in Chapter 4 or in Appendix L.

Recommendations on Conservation and Energy Efficiency

- PSE should fully complete the required tabular summary and narratives for each and every program that will be used for compliance under 19.405.040(1). The narrative should clearly explain what “new energy efficiency” is and how that differs from the specific actions and programs in the updated BCP.
- The narrative should clearly explain the projected large increase in “new energy efficiency” which nearly doubles between 2023 and 2024 and then increases again by more than 45% between 2024 and 2025.
- While there are category costs listed in Appendix L, there is not a summary of all the costs for conservation/EE.
- PSE should more clearly specify which actions or portions of actions are strictly due to CETA and would not have been undertaken if not for CETA.

3. Demand Response (DR)

The Demand Response (DR) specific targets (23.66 MW through 2025 - less than the 29MW in the CEAP) fail to meet the requirement of RCW 19.405.040(6)(a), which calls for aggressive

Demand Response investments *prior to acquiring new resources*, such as the distributed solar and battery DERs discussed at length in Chapter 4.

The amount of DR is significantly smaller than what has been proposed by other utilities with fewer customers, as shown in the chart below:

		2025 DR Target	2025 Peak Demand (est.)
PSE	Draft CEIP	23.66 MW	4800 MW
Avista	Final CEIP	30 MW	2200 MW
Pacific Power	Draft CEIP	37.4 MW	800 MW

Actual program implementation does not even start until 2023. This is somewhat frustrating, as commencement of DR programs has been continually deferred despite previous pilot programs and two previous DR RFPs.

While we are pleased that PSE is now addressing DR, we are concerned that actual program implementation would not even commence until 2023, and that PSE has not fully considered all available programs. We have raised the concern multiple times that PSE has, until now, offered no development strategy for capturing the peak savings that might be achieved from taking advantage of the CTA-2045 enabled electric storage water heaters that are entering the market. Under the recent extension of the compliance date for the Washington state standard, almost all new electric resistance and heat pump water heaters for the residential market will be equipped with CTA-2045 interfaces starting in March 2022.

The magnitude of the grid-interactive water heating resource for demand response should not be under estimated. For example, assuming about 500,000 existing residential electric water heaters for PSE customers, a replacement rate of 40,000 units a year, a 50 percent customer acceptance rate for program participation with new CTA-2045 enabled water heaters and coincident peak load reduction of 0.5/kW per unit, this single measure represents about 10 MW per year of DR potential.

The cost of the CTA-2045 interface and the associated communications device is estimated to be a few dollars per unit. Along with program administration and customer incentives, this resource is anticipated to be highly cost-effective, especially when compared to the cost and risk of relying on market purchases or gas peakers for constrained winter peak demand periods other system stress conditions. In addition, grid-enabled water heaters can effectively act as a storage device for capturing and shifting surplus renewable energy to high demand periods while also reducing transmission and distribution congestion.

Yet PSE indicates very little interest in this resource. The Draft CEIP (table 4.1) proposes 5.8 MW of residential direct load control (DLC) grind-enabled electric resistance water heater acquisition by 2025, and 0.08MW for heat pump water heaters. Despite extensive discussion of the issue in NWECC's comments on the draft IRP, neither the IRP nor the draft CEIP explain why this resource is considered to be so limited.

Recommendations on Demand Response

- PSE should prepare and include a program around the CTA-2045 water heaters as part of their residential water heater program.
- PSE needs to clarify exactly which venue they discuss DR programming with stakeholders. It is important to consider all customer side resources together, and ensure wide review of DR by all stakeholders.
- PSE should accelerate the TVR/TOU pilots. It is not clear why PSE would derate TOU/TVR by 50 percent; TOU/TVR is valuable year-round. Many utilities have long experience with these programs and PSE should be able to incorporate that learning to move the program forward.

4. Incremental costs analysis

PSE's estimated incremental cost analysis raises many questions. NWEAC disagrees with PSE's interpretation of the two percent increase in required revenue due to incremental expenditures (Page 72 "*PSE seeks to meet an incremental cost in 2022–2025 that meets the 2 percent annual average incremental cost guidance. To determine which resources to use to meet this target, we consider the relationship between the different targets*"). However, RCW 19.405.060(3)(a) establishes that "*if, over a four-year compliance period, the average annual incremental cost of meeting CETA standards or interim targets equals a two percent increase in the weather adjusted sale revenue to customers above the previous year*", the utility must be *considered to be in compliance* with the requirements of CETA (emphasis added). This "compliance cost" was added to the legislation to ensure customer protection from large annual rate increases. It is not appropriate for a utility to plan to meet this cost threshold as if it were a target. The annual average two-percent incremental cost is not a "guidance", nor has the UTC to our knowledge issued guidance on this section of the statute. **The point of the statute was to shift electricity resources from emitting generation to clean generation to meet the CETA standards, not to guarantee an automatic increase of two percent in rates every year.** The expenditures to comply with the interim and specific targets may well amount to *less* than an annual two percent increase in incremental expenditures and that is all that is required. The goal is to cost-effectively meet the standards, not plan to attain an annual two percent incremental expenditure increase.

There are also costs attributed to CETA compliance that we question. PSE acknowledges that, "the investment in grid modernization in its entirety is needed for successful transition irrespective whether work occurred before the effective date of CETA or whether it facilitates additional benefits not specifically envisioned by CETA" (Chapter 4, page 129). Most of the proposed integration activities described at the end of Chapter 4 are baseline expectations for a modern utility – these should not be treated as special actions to comply with CETA. PSE's justifications for grid modernization are understandable, but not necessarily driven by CETA; for example, justifications for some upgrades to meet new customer demands; continuing concerns about cybersecurity; increased rate of technology development; other federal and

state laws, such as Distributed Energy Resource Planning; electric vehicle adoption; environmental extremes; and backbone infrastructure are laudable and appreciated (*Ibid*, page 130), but not necessarily entirely due to CETA.

Rather than just qualitatively explaining why some investments support CETA, in order to justify incremental costs, PSE needs to demonstrate why those investments *wouldn't* be done, were it not for CETA. We agree there will probably have to be investments to keep pace with EV adoption and there may even have to be some localized investments to keep voltages at adequate levels if PSE sees really high DER penetrations without smart inverters. But these are going to happen with or without CETA. What PSE is proposing to do, such as a Virtual Power Plan or an integrated Distributed Energy Resource Management System, should, in theory, offset some of those other distribution system investments – otherwise why do it? **We strongly urge a review of the grid costs attributed solely because of CETA in the Final CEIP.**

As for the actual incremental calculation itself, the formula looks correct (Chapter 5, page 163). However, we question the assumption that weather adjusted sales revenue will rise at an inflation rate of 2.5 percent per year, *before* CETA incremental costs are added. We looked for the narrative or a link to other studies, but could find no explanation to substantiate that underlying assumption. Categorizing investments by category provides some information, but may well obscure the actual costs of comparing portfolios. WAC 480-100-660 clearly requires the portfolios to be compared for estimating incremental costs and for reporting on actual costs in the compliance reports, so the categories should be incorporated into portfolios at some point.

As we have stated multiple times, the CEIP was intended to be a stand-alone document, that any reader could pick up and understand. The explanation of incremental costs in PSE's draft CEIP illustrates how important it is for the necessary data to be compiled in the CEIP itself, in a smart and clear manner, per WAC 480-100-640. It is not clear or helpful to refer readers (on page 156) to Appendix FI-EE costs, which contains nothing but a reference to BCP details in Appendix B, which in turn only states that the BCP will be filed on November 1, 2021, with no links to the filed report. The same daisy chain of references happens with Demand Response (page 156) which points to details in Appendix J, but Appendix J just links to the 2021 IRP Appendix E; the poorly formatted summary of costs in Appendix F-2 shows only six programs, two of which have not even been authorized yet, with no explanation of the terms.

Recommendations on the incremental cost analysis and narrative

- Rerun the incremental cost calculations after all resource cost corrections have been made, as recommended above.
- Make clearer which actions would not have been done if not for CETA.
- Review grid costs attributed solely to CETA.
- Change narrative to make clear that the two percent cost cap is not “guidance” or the driver of CETA action.

5. Climate Change Assumptions

Another assumption that warrants corrections in the Final CEIP is the use of outdated weather and temperature data. There is no logical reason to use weather data that does not recognize the serious climate trends we are already experiencing; using data that goes back to 1929 to inform resource planning in 2021 amounts to planning for the past, not the future. We have recommended that PSE run additional ELCC and loss-of-load studies based on datasets from 1980 onwards in the All-Source RFP docket to ensure that the effects of climate change on load and temperatures are clearly analyzed and evaluated; that analysis should be accounted for in the Final CEIP.

Recommendation on Climate Change assumptions

- We repeat the same recommendations we provided in the IRP process and in response to PSE's Petition for exemption from WAC 480-100-640(1): updates to the load forecast and associated proposed targets and actions must incorporate reasonable consideration of the costs and risks of climate change (an environmental effect of carbon emissions) consistent with the definition of "lowest reasonable cost" in RCW 19.280.020.
- ELCC and loss-of-load studies should be based on climate datasets from 1980 onward to ensure that the effects of climate change on load and temperatures are clearly analyzed and evaluated.

6. CBIs/DERs

Working with Customer Benefit Indicators ("CBIs") is a new requirement meant to ensure that *all* customers benefit from the transition to clean electricity (RCW 19.405.010(1), (2) and (6); RCW 19.405.040(8); RCW 19.405.060(1)(c)(iii) and (2)(b)(iii)). A utility must intentionally evaluate each specific action and program through the lens of each CBI and indicate if the CBI is applicable or not to that action. It is understandable that the first time working with CBIs would prove challenging, and we acknowledge PSE's efforts to try to update the PSE-devised CBIs for the IRP, with input from the various advisory groups and agree there is still work to be done.

Within the Draft CEIP, PSE applied the CBIs only to Distributed Energy Resources ("DERs") options, not to any other specific actions, so our comments here are limited to that narrow actual application. In the Final CEIP PSE should clearly explain how the CBIs will be considered in the selection of *all* EE, DR and RE specific actions. This clarification should not wait until 2023, but be clearly explained in the Final CEIP.

In this first application of CBIs, it is not clear just how the CBIs influenced the DER choices. It seems some of the choices were determined prior to any application of a CBI. For example, PSE selected twelve battery and ten distributed solar options, without explaining the reasoning behind the choices, for their contractor, Black & Veatch ("B&V") to analyze for programmatic and resource costs (Appendix K). B&V also analyzed the achievable market potential for each option, except for three concepts, "PSE Mobile Batteries", "PSE Substation Batteries" and "PSE Utility Scale batteries". We have yet to find an explanation of what impact that lack of market

potential had on the final rankings, but it must have had some impact, as neither the “mobile batteries” concept or the “Utility scale battery substation” concept were placed in any of the DER “Suites” for consideration (Table D-2) for the CEIP.

Two new programs, “multi-family unit battery” and “C&I rooftop solar leasing” were added “based on stakeholder feedback” (CEIP page 41). In fact, PSE received feedback from several of the advisory committees that stakeholders had concerns about “leasing” programs, particularly those aimed at named communities, yet those programs remain on the options list. Advisory groups repeatedly supported reliable renewable resources to named communities, with control of those resources in the community, a very different proposition from a leasing approach, which is not included here.

PSE’s weighting system for CBIs is difficult to understand. As far as we can tell, twenty-two DER options were “scored” in Table 3-15, but Table 3-5 presents the summarized scores incorrectly. Corrected or uncorrected, it is hard to figure out why options that have identical or nearly identical scores as other options were dropped for further consideration – for example, “PSE substation batteries” and “Mobile Batteries” have identical scores, yet the “Substation batteries” option is dropped from further consideration. “C&I battery install incentive” scores a bit higher than “Mobile batteries”, “third party utility scale distributed battery PPA” or “Battery stations”, yet “C&I battery install incentive” is also dropped from further consideration.

There is no explanation as to how the level of scoring was determined or applied. For example, under the CBI labeled decrease in time and duration of outages, how was it decided the “PSE Substation batteries” option *might* decrease the number and/or duration of outages (score 1), but the “3rd party customer-sited distributed Battery PPA” option would *directly decrease* the number or duration of outages (score 2)? The difference is not explained and the result is confusing.

Overall, we feel that utilities need more guidance from the Commission on how to formulate and use CBIs in planning. The approach taken by utilities in this round was inconsistent and burdensome for stakeholders, and the impacts of using CBIs to facilitate an equitable distribution of benefits are not apparent. NWECC joined with the Energy Project (TEP), the Public Counsel Unit of the Attorney General’s Office, and Front and Centered to prepare CBIs that are more focused, detailed, and that directly support the CETA statutory elements for which CBIs must be developed. Being more specific or detailed might avoid the confusing weighting system presented in the Draft CEIP and we would strongly urge PSE to look at amending the CBIs to be more specific, with clear definitions and explanations of what the CBI is intended to achieve.

Recommendations on CBIs and DERs

- PSE must revise the current scoring system of CBIs to better distinguish between options and explain how particular options received particular scores.
- PSE needs to explain in the Final how the CBIs will influence, if at all, the selection of other resources.

7. Order of Resource Acquisition

RCW 19.405.040(6)(ii) and (iii) require that a utility consider the order of resource acquisition, namely first all cost-effective, reliable, and feasible conservation and efficiency resources and demand response, then existing renewable resources, then renewable resources and energy storage *before* acquiring new resources. However, this draft CEIP does not explain how and in what manner this requirement was considered.

Recommendations for Order of Resource Acquisition

- PSE should explain how it determined new renewable resources and thermal builds were more appropriate choices than acquiring additional conservation or demand response.

Conclusion

We believe the purpose of the CEIP is to provide certainty, accountability, and transparency to the implementation of CETA. Unlike the IRP, the CEIP is not merely the “utility’s plan,” but should be a collaborative work product, supported by the participation of customers, and approved by the Commission. As PSE maps a path to achieving an equitable transition to a 100-percent clean electricity grid, the CEIP will be an important document for communicating to customers how PSE plans to supply them with 100-percent clean electricity, and meet the requirements of the law. We offer these comments on the Draft CEIP in the spirit of improving the final product, and in a good faith effort to help PSE fulfill the intent and purpose of CETA – to achieve an equitable transition to a 100-percent clean electricity grid. FINAL CEIP’s from all three utilities set a solid foundation for our state’s clean energy transformation.

Thank you for the opportunity to comment, and we look forward to continuing to work with PSE, the UTC, and stakeholders to develop a robust Clean Energy Implementation Plan that the Commission can approve.

Respectfully,

Joni Bosh and Lauren McCloy
NW Energy Coalition

