

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of

Puget Sound Energy 2021 Clean
Energy Implementation Plan

DOCKET UE-210795

COMMENTS OF THE ENERGY PROJECT
REGARDING
FINAL PSE CLEAN ENERGY IMPLEMENTATION PLAN

MARCH 2, 2022

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Table 2: Summary of Extent to which PSE’s CEIP Addresses the Joint Advocates Proposed Customer Benefit Indicators (CBIs)

I. INTRODUCTION

1. The Energy Project (TEP) files these comments regarding PSE's Clean Energy Implementation Plan (Final CEIP)¹ in response to the Notice Of Opportunity To File Written Comments issued in this docket on December 28, 2021.
2. A basic foundation point for these comments are the Joint Comments on Customer Benefit Indicators (CBIs) developed by Public Counsel, The NW Energy Coalition (NWECC), TEP, and Front & Centered (Joint Advocate (JA) CBIs). The Joint Advocate recommendations consisted of a set of CBIs covering all of the statutory elements required by the Clean Energy Transformation Act (CETA), with accompanying metrics. The purpose of the JA CBIs was to provide detailed and coordinated input to the utilities from low-income, equity, and energy efficiency advisory group members.² These Customer Benefit Indicators were presented on July 30, 2021, and shared with PSE and the other investor-owned utilities at that time. Upon issuance of the Company Draft CEIP on October 15, 2021, TEP provided written comments to PSE on November 12, 2021 regarding the Draft, addressing the JA CBIs in more detail.³
3. The current comments to the Commission build on TEP's earlier filings, and emphasize key areas of remaining concern for TEP regarding the CBIs selected by PSE in the final CEIP. In some areas, PSE makes reasonable proposals for CBIs, as noted below. In a number of other

¹ References in these comments to the PSE Final CEIP refer to the Corrected CEIP filed on February 1, 2022.

² Front and Centered is a member of PSE's Equity Advisory Group (EAG). Public Counsel, NWECC, and The Energy Project are members of PSE's Low-Income and Conservation Advisory Group.

³ Joint Comments on Customer Benefit Indicators on Behalf of The Energy Project, Front And Centered, NW Energy Coalition, and the Washington State Office of The Attorney General, Public Counsel Unit, July 30, 2021. The comments were also filed with the Commission. ("Joint Advocate CBIs" or "JA CBIs").

areas, however, TEP believes that the CEIP falls short and can be improved. In these areas, TEP proposes specific additional CBIs and metrics for adoption by the Commission as conditions to CEIP approval. These additional CBIs are listed for reference at the end of the comments, and discussed below.

General Points

4. The Energy Project recommends that the PSE CEIP incorporate key elements of the approach reflected in the July 30 Joint Advocate CBIs. Since WAC 480-100-640(4)(c) requires that each utility must include, at a minimum, at least one CBI for each statutory element, the JA CBI recommendations are organized around the benefit areas identified in the statute and rule, with specific CBIs identified for each element, along with suggested metrics for each CBI. This approach is depicted in Tables 1 and 2 submitted with these comments. In addition, Table 2 compares PSE's CBIs with the JA CBIs, indicating whether or not there is overlap between the two. The Energy Project recommends additions or modifications to the CEIP in order to improve the effectiveness of the final product.
5. As Table 2 shows, there are some areas of agreement between the PSE final CEIP CBIs and the JA CBIs. On the other hand, PSE's CBIs are not as extensive or detailed as the JA recommendations. PSE's CBIs in a number of cases are quite general and high level, and may not satisfy the definition of a CBI in WAC 480-100-605. Overall, TEP believes there is a need for more specificity in the draft CBIs, and the metrics used to measure progress. In addition, as discussed below, several important areas are not addressed in the PSE CBIs. The JA CBIs goal is to add some more completeness and practical specificity for measuring improvement in

particular tangible areas that reflect whether or not direct benefits are being experienced by customers.

6. Another overarching concern is the inadequate explanation of how PSE's planned activities (specific actions) will impact their CBIs, especially in areas that are critical for vulnerable populations and highly impacted communities, including low-income customers. We address this issue in particular in the Distributed Energy Resources (DER) comments below. The Energy Project strongly supports greater pursuit of cost-effective DER, especially when resources deliver benefits to vulnerable populations and highly impacted communities. We are concerned that PSE does not clearly articulate in its Specific Actions how its proposed programs will deliver these benefits.
7. A further general comment is that the PSE framework is somewhat confusing. The final CEIP lists the proposed CBIs and metrics in Appendix H, Table H-1⁴, linking CBIs and metrics to multiple statutory elements. The overlap and redundancy make it more difficult to track which CBI and which metrics are related to a given statutory element.⁵ While there is certainly some potential overlap, TEP recommends an approach that minimizes duplication and makes decisions about where CBIs and metrics fit in the framework, so as to give adequate weight to each discrete statutory element. This is addressed in more detail in the next section of these comments.
8. The final CEIP indicates that PSE will continue to work with stakeholders in identifying and developing future customer benefit indicators and data sources for CBI metrics, and

⁴ This information is presented as Table 3-6 the Final CEIP.

⁵ The Energy Project's Table 1 shows this overlap.

reporting on these sources and baseline data in 2022.⁶ The Energy Project agrees this is a long-term process and this commitment is welcome. At the same time there is still a need for more work on the current CEIP and time to make improvements within the current schedule. The Commission can also improve the final product by attaching conditions to approval. This CEIP will be in place for four years, and requires best efforts for a strong initial framework, rather than a minimalist approach, with a promise of future CBIs to be developed after this plan is final.

II. CUSTOMER BENEFIT INDICATORS AND METRICS FOR STATUTORY BENEFIT AREAS

A. Reduction of Burden/Cost Reduction

9. In its comments on the draft CEIP, TEP expressed concern about PSE's blurring of two statutory elements - Cost Reduction and Reduction of Burden. The Energy Project recommends that the two statutory elements be addressed in distinct ways to recognize their different emphases.

1. Reduction of Burden

10. PSE lists three CBIs for Reduction of Burdens. (1) "improved affordability;" (2) "improved participation in clean energy programs"; and (3) "improved cultural and linguistic outreach."⁷ Focusing on the first CBI -- improved affordability-- PSE's proposed metric is to track the reduced median electric bill as a percentage of income both for residential customers generally and for residential customers who are energy burdened, including vulnerable populations and highly impacted communities. Reduction of Burden can be appropriately

⁶ Final CEIP, p. 10.

⁷ Final CEIP, Table 3-6.

addressed by looking at the percentage of income spent on energy, that is, the “energy burden” consistent with the CETA requirements and definitions.⁸ Although the CBI language is not completely clear, PSE’s description of the metric in Chapter 3 and Appendix H, appears to indicate that energy burden as defined in CETA would be the basis of the metric.⁹

11. PSE’s CBI parallels the JA recommended CBI, which states: “reduction in number of customers suffering from high energy burden”. The Energy Project recommends that this CBI be used in place of PSEs generalized language regarding “improved affordability of clean energy” because it is more explicitly descriptive of the focus on burden. The PSE metrics specifically address energy burden, as do the JA proposed metrics. However, the targeted PSE metric language references “energy burdened households” without specific reference to low-income, vulnerable populations and highly impacted communities. Appendix H states that “this metric *can be calculated and presented* for the following populations: all residential PSE customers, highly impacted communities, and vulnerable populations.”¹⁰ This appears to leaves it open as to whether the metric will in fact be calculated for vulnerable populations and highly impacted communities. The Energy Project recommends that this be made explicit in the metric as proposed by the JA o specifically track energy burden for: vulnerable populations and highly impacted communities, and customers participating in bill-assistance programs (the latter are known low-income customers).

12. PSE’s CBI to “increase culturally and linguistically accessible program communications for named communities” is reasonable as stated, and is consistent with the JA recommendation

⁸ RCW 19.405.020(17).

⁹ Final CEIP p. 79, n.38.

¹⁰ Final CEIP, Appendix H, p.3 (emphasis added).

for a CBI stating: “reduced barriers for program participation.” Upon closer examination some concerns emerge however. Based on the description in Chapter 3 of the CEIP, the metric focuses strictly on “outreach material” and “impressions,” emphasizing material distributed to customers via electronic means. There is no explicit discussion of how increases would occur, or of other outreach strategies not tied to electronic materials, such as different types of community engagement. The JA metrics for this CBI propose that PSE would “expand translation services”. The Energy Project recommends that this metric be added in connection with this CBI to reduce language barriers for customers.

13. PSE’s CBI for “improved participation in clean energy programs” is also a proposed CBI for Energy Benefits and is discussed in that section of our comments, where TEP believes it is a better fit.

2. Cost Reduction

14. The Cost Reduction element should properly have a different emphasis, focusing on ways in which household energy costs are being reduced, as distinct from the percent of income calculation involved with energy burden. This is where PSE’s blurring of Cost Reduction with Reduction of Burden is most clearly problematic. For this element, PSE proposes only one CBI, “improved affordability of clean energy”, the same CBI proposed as an indicator for Reduction of Burden. If that CBI is used for that statutory element, as seems more appropriate due to its focus on energy burden, PSE is left with no CBI for Cost Reduction. This is not consistent with the requirement in WAC 480-100-640(4)(c) that the utility provide at least one CBI for each statutory element.

15. The Energy Project proposes adoption of two JA CBIs to address Cost Reduction. First, TEP recommends adoption of the JA CBI to track “reductions in the number and amounts of arrearages.” Arrearages are a direct reflection of the affordability of energy for individual households, as well as reflecting the effectiveness of customer assistance programs. This would include a metric regarding reductions in number and percentages of residential customers with arrearages 90+ days, with breakout for customers by zip code/census tract, renter, highly impacted communities, vulnerable populations, known low income, and BIPOC communities. PSE’s final CEIP does not include any CBIs or metrics regarding arrearages. Omitting a measurement that would potentially reflect reduced energy costs for customers would be a missed opportunity to measure direct tangible improvement in energy costs, in particular for vulnerable populations and highly impacted communities.

16. It is TEP’s understanding the PSE does not believe arrearage issues are germane to the CEIP process,¹¹ notwithstanding the fact that the CEIP discusses arrearages as an important factor for vulnerable populations. Interestingly, the final CEIP mentions arrearages in its discussion of vulnerable populations in Table 3-4.¹² PSE states that arrearage data is “forthcoming” which is somewhat perplexing since arrearage data for geographic areas (zip codes) with named communities is currently being collected and has been reported to the Commission for several months under the Commission’s COVID-19 relief orders in Docket U-200281. As The Energy Project has demonstrated, this zip code level data can be compared to census tract data to determine the correlation between high arrearages and highly impacted communities as

¹¹ TEP addresses this general assertion in a later section of the comments.

¹² Final CEIP, p. 57.

designated by the Washington Department of Health. The Energy Project's analysis of PSE's arrearage data through March 2021 showed that all of PSE's top five highest-arrearage zip codes have areas designated as highly impacted communities.¹³

17. Second, TEP proposes adoption of the JA CBI to track expanding bill assistance programs. The metrics for this CBI include (1) increased penetration rates overall and among highly impacted communities and vulnerable populations; and, (2) increase annual program budget showing increases over prior years. PSE's CBIs and metrics do not appear to recommend tracking information regarding participation in bill assistance programs.¹⁴ As discussed below, this appears to be based on the view that this information does not fit within the CEIP intended framework. Again, TEP disagrees with this unduly restricted view of the CEIP and CBIs. There are few factors more germane to Cost Reduction for low-income customer households than availability of bill assistance and the reduction or elimination of arrearages that cause disconnection.

B. Energy Security

18. For this statutory element, the PSE CEIP now lists one CBI: "improved access to reliable clean energy," as measured by an "increase [to] numbers of customers who have access to emergency power."¹⁵ This CBI matches one of the two recommended JA CBIs for this element. It was not included in the draft CEIP and may have been adopted in response to the TEP/JA recommendations and comments on the draft CEIP.

¹³ Docket U-200281, Supplemental Comments of The Energy Project, May 7, 2021, Appendix A.

¹⁴ PSE included some bill assistance tracking (CACAP) in the draft CEIP, Appendix H, p. 6.

¹⁵ This same CBI is also listed to address "Risk Reduction."

19. While this is an improvement to the CBIs, TEP has some remaining concerns regarding the proposed related metric. PSE's metric states: "increase number of customers who have access to emergency power." The JA metric states: "increase number of neighborhoods with storage/back-up/locally-powered centers for emergencies." The PSE metric on the surface thus appears to overlap the JA recommendation, but in practice there may be important differences of emphasis. A review of the discussion in Chapter 3 and Appendix H indicates that for PSE "access to emergency power" focuses primarily on whether a customer would have a combination of solar (net metering) and battery backup. PSE states it has no current program specific to net metering and battery storage. The CEI P indicates that PSE may be planning to address this via a solar/battery leasing program. The Energy Project's serious concerns with PSE's proposed leasing program are discussed in detail below. In summary, this approach to emergency backup has at least two significant flaws: (1) it relies entirely on individual customer acquisition of solar and battery technology, rather than on system and community/neighborhood/geographic area-based approaches; and (2) leasing program customer costs would be a barrier to participation and access.

20. Although PSE's metric discussion addresses the concept of "access to a community center with backup power,"¹⁶ PSE raises the difficulty of counting the number of customers who would benefit from such a facility. The Energy Project suggests that a workable solution to that problem is to track the increase in the number of community centers with backup power as a metric, with a break out for centers in vulnerable populations and highly impacted communities.

¹⁶ Appendix H, p. 15.

In a similar vein, in addition to tracking individual leasing (of battery storage, or solar/battery), PSE should also track the deployment of battery backup facilities that can support continued local distribution of power through localized grids in named communities. Accordingly, TEP strongly recommends that the Commission adopt the JA proposed metric for this CBI, which is designed to measure an increased number of neighborhoods with storage, back up, or locally powered centers for emergencies.

21. Joint Advocates and The Energy Project recommend an added CBI for Energy Security -- "reduced residential disconnections" -- which is focused on the customer experience of maintaining the security of connection to essential energy services. Perhaps the most fundamental measure of energy security is whether a household is able to remain connected to essential utility service. PSE's CBIs and related metrics do not include tracking of disconnections, apparently based on the view that this is an area not properly addressed in the CEIP context. The Energy Project respectfully disagrees. Experiencing a utility shut-off is the definition of energy insecurity. If disconnections from service show an increase, especially in named communities, it would be hard to simultaneously conclude that customers are deriving energy security benefits from the transition to clean energy. In this category, metrics should be adopted to track: (1) reduction in the number and percentage of residential disconnections; and (2) reduction in the number and percentage of residential disconnections by location and demographic information, including named communities.

C. Risk Reduction

22. The Energy Project recommends including an additional CBI for this element to reflect reduction of risk to customers, specifically: a” reduction in numbers of customers with low credit scores, and a reduction in customers sent to collection.”
23. As TEP’s analysis of the utility arrearage data by zip code in the COVID-19 docket showed, there is strong correlation between customers with arrearages, and zip codes with highly impacted communities and social and health vulnerability measures as identified by the Department of Health Environmental Health Disparities Map. Customers with arrearages, and those with low utility credit code scores, are most at risk of disconnection and are much more likely to disproportionately include communities of color.¹⁷ It is TEP’s understanding that PSE assigns credit codes to customers, based on payment history, past due notices, and prior disconnections. Typically, those with the worst credit codes and largest arrearages are most at risk of disconnection.¹⁸
24. The Energy Project’s recommended CBI concerning utility credit code scores, which includes a utility review of its credit code score system, is also consistent with initiatives to address systemic racism. Tables 3-1 through 3-4 of PSE’s CEIP,¹⁹ include specific factors related to racial equity (race (people of color/BIPOC), historical red line influence) as part of the discussion of vulnerable populations. As discussed earlier, analysis of the arrearage data in the

¹⁷ Docket U-200281 (COVID-19 Docket), The Energy Project’s Supplemental Comments, May 7, 2021, see esp. pp 4-9.

¹⁸ Docket U-200281, Statements of Carol Wallace on behalf of PSE, Commission May 12, 2021, Open Meeting. PSE described plans to begin disconnecting customers that were over 200 percent Federal Poverty level, based on analysis of third-party data.

¹⁹ Final CEIP, pp. 52-58.

COVID-19 docket shows that communities with high levels of arrearages are correlated with highly impacted communities, including BIPOC communities.

25. Based on Table 3-6, it appears that the PSE's final CBIs related to this statutory element are "reduction in climate change impacts" and "improved access to reliable clean energy" (duplicating the Energy Security CBI). Neither of the CBIs for this statutory element, or their related metrics, address customer household-level financial risk. Moreover, because PSE's metric for improved access to clean energy is unduly tied to the flawed battery leasing proposal, as discussed in the previous section, it cannot reasonably be adopted as a tool for risk reduction. As a practical matter, the battery leasing program as proposed creates the potential for *increased* financial risk for low-income and vulnerable customers.

26. The Energy Project, therefore, recommends including an additional credit score CBI as a more specific measurement that is directly related to whether PSE utility customers are treated equitably with respect to credit and collection. In connection with the CBI, TEP recommends: (1) measuring the reduction in the number and percentage of residential customers with the lowest two tiers of the utility's credit code scoring system, and (2) a utility assessment and review of its credit code scoring system, and (3) a reduction in the number and percentage of residential customers sent to collection, with tracking for low-income and vulnerable populations and highly impacted communities. Improvement in this CBI will directly reflect reduction of the risk to vulnerable customers of disconnection or other negative financial consequences of the credit and collection process.

D. Resilience

27. The Energy Project expressed concern in comments on the Draft CEIP that PSE's approach to the statutory elements of Resiliency and Energy Security in the draft CBI reflected some redundance, similar to the Cost Reduction/Risk Reduction. The Energy Project was concerned that this type of circularity and redundancy would weaken the importance of each of the discrete statutory elements, reducing the tools to advance those elements, and narrowing the scope of CETA implementation.

28. PSE's final CEIP now identifies Resilience as a stand-alone element, with a CBI to measure "decrease[d] frequency and duration of outages." As metrics, the PSE CEIP would track the decreased numbers of outages, total hours, and total backup load served during outages using SAIDI and SAIFI. This is generally consistent with TEP and JA recommendations. The Energy Project agrees that decreasing the number and duration of outages is a reasonable CBI for resiliency with the related metrics. An additional component to the metrics should be included however. The Energy Project recommends that this CBI and related metrics be focused on geographic areas with vulnerable populations and highly impacted communities, particularly areas with a history of long service outages. The final CEIP, in Table 3-19, shows some baseline data for the general customer population, as well as break outs for vulnerable populations and highly impacted communities. In Appendix H, PSE states that outage duration and frequency "can" be tracked for vulnerable populations and highly impacted communities.²⁰ Table 8 in the appendix, however, under the heading of "Measurement", "presents a series of measurements to

²⁰ Appendix H, pp. 12-13 and Table 8.

calculate the decrease in number and duration of outages, referencing only the SAIDI and SAIFI metric “that is published on the WUTC’s website.”²¹ This does not reference targeted data for named communities and makes it unclear if that level of tracking will actually occur.

29. Even tracking outages for vulnerable populations and highly impacted communities at the service area level is not adequate. The Energy Project’s recommendation is that outages also be tracked in more targeted ways so that patterns can be determined at the census tract or zip code level. It is TEP’s understanding this data is available. We note that PacifiCorp has conducted this type of analysis in its service territory in connection with its CEIP.²² Tracking the outage data at this level will be the most informative and useful data about whether inequitable impacts are occurring and will allow decisions to be made about necessary investments in named community geographic areas.

30. The Energy Project’s earlier comments had also supported adoption of the additional JA CBI for this element: “reduction in energy and capacity need.” This included a related metric: “increased participation in targeted demand response, load management, and behavioral programs that result in a measurable reduction in peak demand.” While PSE does not adopt this CBI, it does include a metric that would track “reduction in peak demand through demand response programs.” While this has some similarities with the TEP/JA metric, the JA metric has more specificity and is better targeted, measuring increased participation in not only demand response programs, but in load management and behavioral programs. PSE’s Chapter 3 discussion indicates that they plan to make a general measurement of “reduction in peak demand

²¹ *Id.*

²² Docket UE-210829, PacifiCorp Final CEIP, December 30, 2021, pp. 56-59.

due to demand response (DR) initiatives,” tracking that information for three levels of customers: all customers, highly impacted communities and vulnerable populations.” The metrics are to be defined and measured in the future.²³

31. The JA CBI and metric goes beyond the PSE proposal and would measure increased customer participation in programs for targeted demand response, load management, and behavioral programs. This goes further than PSE’s analysis at the level of the customer class/service territory reduction in peak demand to additionally focus on the engagement of individual customers in programs that contribute to peak reduction. The Energy Project recommends that the addition of the JA recommended term as a CBI related to Resilience, in addition to the outages CBI. As an alternative, and at minimum, the JA metric for increased participation should be added as a metric for this element.

E. Energy Benefits

32. In the draft CEIP, in its Figure H-1, PSE identified only one CBI for the Energy Benefits statutory element: “improved participation from named communities.” The related metric provided was the “count and participation” within named communities, appearing to relate primarily to bill assistance programs.²⁴ The Energy Project commented that this indicator seemed to be more appropriately linked to another statutory element, Reduction of Burdens, or to Reduction of Cost. Participation in bill assistance programs is a financial benefit related to burden reduction or cost reduction and is not primarily energy related. The Energy Project questioned whether this single “participation” indicator and metric was the best choice to address

²³ Final CEIP, pp. 84-85.

²⁴ It was unclear which types of program participation were relevant. Appendix H to the Draft CEIP mentioned tracking participation in the CACAP program.

the broad range of matters covered by the concept of “energy benefits,” particularly clean “energy benefits.” The Energy Project recommended that PSE instead consider for this element, adoption of the two JA CBIs which more directly focus on energy benefits, as reflected in: (1) “improved efficiency of housing stock”; and (2) “low-income and vulnerable population access to an increasing number of renewable resources and non-emitting DER.”²⁵

33. PSE’s final CEIP has at least partially addressed this concern. As reflected in Table H-1, the final CEIP modifies the CBI for the Energy Benefits statutory element, so that it now states: “Improved participation in clean energy programs from highly impacted communities and vulnerable populations.” This would be measured by an “increased number and percentage of participation in energy efficiency, demand response and distributed resource programs or services by customers withing vulnerable populations and highly impacted communities.” In addition, PSE would track the increase in the percentage of electricity generated by distributed renewable energy projects.

34. While this CBI is an improvement over the draft, TEP has two recommendations for further improvement. First, TEP recommends adding two JA metrics for improved access to renewables and non-emitting DG: (1) increase in number of distributed and renewable projects for named communities; and (2) increase in the percentage of electricity from renewable DG projects. These metrics will provide a broader picture of progress in this area by going beyond the simple “participation” focus PSE proposes.²⁶

²⁵ If these indicators are used, then increased program participation does become relevant, but as a possible metric, tied to energy efficiency and/or renewable and DER programs. Other proposed Joint Advocate metrics are listed on Table 2.

²⁶ Appendix H, p. 20.

35. Second, TEP recommends adding a second CBI to track “improved efficiency of housing stock, including low-income housing.” The key metrics for this CBI would be: (1) improvement and expansion of energy efficiency in rental housing; and (2) increase in number and percentage of appliances converted to efficient models. While PSE’s CBI may impact this in general sense, a CBI directly aimed at increasing efficiency of housing stock is more targeted, in particular through the metric for improved energy efficiency in rental housing stock and increased penetration of energy efficient appliances. PSE’s CBI for improved participation does not focus on particular types of housing stock.

III. DISTRIBUTED ENERGY PROGRAMS

A. Overview – Distributed Energy Resources and “Specific Actions”

36. Distributed Energy Resources (DER), including energy storage and solar power can provide significant benefits for low-income communities, vulnerable populations and highly impacted communities. At a general level, TEP is strongly supportive of utility efforts to expand these resources, and to make them more equitably available to more customers. Distributed Energy Resources programs should be an important component of the CEIP.

37. The CEIP describes two DER programs for residential customers that would also include a focus on what PSE terms “income eligible” customers: leasing for battery storage, and leasing of solar PVs. While solar PVs and battery storage can be worth pursuing as a general proposition, TEP here raises several concerns and questions with these specific proposals.

38. The Energy Project observes that PSE’s focus in these programs appears to be primarily at the individual household level, through individual household rooftop solar and battery storage.

One threshold consideration is whether DER deployed in this way is more cost-effective or efficient than alternative distributed approaches such as community solar, larger scale local solar installations (schools, hospitals, parking lots, government buildings), or distribution substation battery back-up. Direct load control can also be part of the picture (discussed below). Household level solar and battery deployment may only be part of a prudent approach, and may not be the best first choice.

39. The Energy Project also has concerns with the lack of detail presented with the DER programs. Programs intended to benefit highly impacted communities and vulnerable populations should contribute to reduced energy burden, a centerpiece of CETA. Yet it is not at all apparent that would occur from these programs, particularly the battery storage leasing program. The Commission’s CEIP rules require a narrative description of Specific Actions, which must include: “[a]n assessment of current benefits and burdens on customers, by location and population, and the projected impact of specific actions on the distribution of customer benefits and burdens during the implementation period[.]”²⁷ As we discuss below, PSE’s descriptions of planned specific actions for solar and battery leasing fall short of these requirements and expectations. Many of the “Specific Actions” described in Chapter 4 are only possible program concepts, and not specific plans that will necessarily be implemented. Exact programs and program designs will hinge on the outcome of the Targeted DER RFP, which is still pending.

²⁷ WAC 480-100-640(6)(b)(i) and (ii).

40. PSE's specific plans for DR and DER will not be shaped until the Targeted DER RFP process concludes,²⁸ likely sometime late in 2022, based on the timeline shown at page 111 of the Corrected CEIP. As a result, the specific actions provided are tentative in nature. Even if these are good ideas, stakeholders and the Commission cannot adequately evaluate whether the plan meets CETA requirements without more detailed descriptions and explanations. This process should be similar in the regard to the Biennial Conservation Plan, which provides both detail and explanation as a road map towards the conservation targets.

41. Finally, TEP has concerns with some specific aspects of the program designs, which are discussed below in connection with each DER program.

B. Battery Energy Storage Programs for Residential Customers

42. PSE's plans to launch a battery energy storage leasing program are described in Chapter 4. These include leasing of commercial & industrial storage, residential storage, and residential storage plus solar. The Energy Project has a number of concerns, as described below:

1. Charges to customers

43. Battery programs for residential customers, including for "income eligible" customers, are described as follows: "PSE will lease battery energy storage systems to residential customers. Customers will pay a small monthly fee for backup power services."²⁹ Perhaps in response to significant concerns raised by TEP and other stakeholders in response to the draft CEIP, the final CEIP includes a new sentence about battery leasing for income-eligible customers: "For

²⁸ Final CEIP, p. 122. PSE states, "We will establish final program designs based on the results of the Targeted DER RFP (see Chapter Four, Demand Response Specific Actions for more details).

²⁹ Final CEIP, p. 133.

income-eligible customers, PSE will look to further reduce or eliminate fees to increase affordability and will also identify customers located in areas with higher outages and lower reliability.”³⁰ While this change acknowledges the affordability concern, this new language is vague and still leaves in place the charge to customers.³¹ Appendix K states that a “more accessible rate” would be charged to income eligible customers for battery leasing. Even if the fee is eliminated for “income” customers, many who are not technically “income eligible” but are nevertheless economically challenged and would be negatively impacted.

44. Programs that require additional costs and fees to be paid by customers in vulnerable populations and highly impacted communities would increase energy burden. This is explicitly contradictory to the goals of CETA and highly problematic for inclusion in a CEIP. Battery storage should be provided to income-eligible customers, highly impacted communities and vulnerable populations at no extra cost. In addition, PSE should focus efforts on areas with income eligible customers, vulnerable populations and highly impacted communities with a history of outages and low reliability.

C. Disparate treatment

45. As currently proposed, residential customers will pay a monthly fee for the battery storage equipment located at their premises. In contrast, PSE will “lease space” from commercial

³⁰ *Id.*

³¹ Appendix K, the Black and Veatch DER study, shows very clearly that battery storage leasing to low-income customers is conceived as program whereby customer still must make additional payments to PSE, although potentially at lower rates than “residential battery leasing.” p. 18.

and industrial (C & I) customers.³² Thus, C & I customers would be compensated for battery storage by PSE while residential customers would not. The rationale for this difference in program design for the residential versus C&I program is not clearly explained in the CEIP itself. In Appendix C-2, PSE's responses to stakeholder comments on the draft CEIP, the Company explains that for the C&I battery leasing program concept "there is no customer use case intended, unless a fee is paid for backup power configuration to be added."³³

1. The "Specific Actions" narrative is inadequate

46. The CEIP lacks clarity and detail regarding exactly how (and whether) the battery storage leasing program would reduce burdens for and provide benefits to vulnerable populations and highly impacted communities, as required by the CEIP rules.³⁴ The first sentence of the Customer Benefits section states that: "PSE seeks a diverse portfolio of distributed battery energy storage programs utilizing different ownership structures and marketing and outreach strategies that alleviate burdens affecting vulnerable populations and highly impacted communities."³⁵ The program description, however, only references "income eligible" customers, not vulnerable populations and highly impacted communities. While income is an important factor, the description and definitions of highly impacted communities and vulnerable populations encompasses more than just income, as set forth in Chapter 3 of the CEIP.³⁶ The

³² Final CEIP, p. 134. There would be an option for PSE to provide backup power to the customer "for a small fee."

³³ Appendix C-2, p. 34. PSE also states that the C&I concept would install batteries on a larger scale than the customer would require.

³⁴ WAC 480-100-640(6(b)(i).

³⁵ Final CEIP, p. 134.

³⁶ Final CEIP, Chapter 3, pp. 51-65.

CEIP also lacks any explanation of specific actions PSE plans to take to reach vulnerable populations and highly impacted communities.

47. As a source of backup power, some of the anticipated benefits from the battery storage program are described in the CEIP as follows:

Behind-the-meter battery storage can provide vulnerable populations and highly impacted communities increased resiliency through backup power, which will decrease the time and duration of outages for participating customers, with sustained backup power when paired with solar.³⁷

48. Notably, however, the discussion of customer benefits from these programs does not include reduction of burden. The text makes a general statement that the program will “alleviate burden,” but no explanation is offered about specifically how burdens would be alleviated. Certainly, offering a new service that offers reliability, but at a cost, is not on its face reducing customer burden. Below, we also discuss concerns related to the DER selection process and scoring, and consideration of reduction of energy burden.

49. Specific program designs for any battery leasing programs have not yet been determined, and thus ultimately could look quite different from the high-level descriptions in the Final CEIP. PSE states that the final set of program designs will be determined based on the results from the Targeted DER RFP.³⁸ PSE proposed “specific actions” are therefore somewhat uncertain at this point in time.

³⁷ Final CEIP, p. 135.

³⁸ Final CEIP, p. 133. The Targeted DER RFP is described earlier in Chapter 4, at pp. 110-112.

2. Questionable CBI scoring in DER selection

50. PSE's rating of various DER options with regard to the CBIs appears rather questionable. PSE provides additional narrative regarding the selection process and criteria for its various DER program concepts in Appendix D-1, and the scoring criteria and ratings are shown in an Excel workbook in Appendix D-3. Given that the residential battery leasing program concept will require customers to pay an added fee for battery storage leasing, it is perplexing that PSE's DER selection process included CBI-scoring that assigned a score of "1" to the battery leasing program for both the mass market residential and income-eligible residential program (on a three-point scale of 0,1, or 2).³⁹ DER options with a score of "1" in this area should indicate that the program would reduce the percent of income spent on electricity, and reduce energy burden, especially for vulnerable populations and highly impacted customers, in a "meaningful decrease" for participating or targeted customers.⁴⁰ It is difficult to comprehend how a battery leasing program that would charge an additional fee for an added service, could reduce energy burden.

51. Also confounding, both the battery leasing for 'mass market residential' customers and 'income eligible' residential customers were given the highest score ("2") for increased outreach materials in non-English languages. Providing translated materials would seem to be more related to how a DER program should be implemented, rather than how it compares against other potential offerings under consideration. It appears that high CBI scoring was a major factor in selection of the battery leasing option. PSE observes in Appendix D-1, that despite the moderate

³⁹ Final CEIP, Appendix D-3, "CBI Scoring" worksheet, row 16 and columns R (Residential Battery Leasing) and S (Residential Battery Leasing – Low Income).

⁴⁰ Final CEIP, Appendix D-3, "CBI Scoring" worksheet, row 16. None of the DER options scored a "2," the highest score, in the CBI scoring. *Id.*

Societal cost test (SCT) and capacity cost for battery leasing, it was chosen for the “high CBI scoring and moderate market potential.”⁴¹ The market potential of battery leasing for income-eligible customers is 0.03 MW.⁴²

3. Cost of distributed battery storage

52. The estimated costs of distributed battery storage -- shown as \$12.5M-- are substantial, although there is a lack of detail and clarity regarding intended program structure and fees.⁴³ Appendix E2, also shows incremental costs of \$34.2M for enablement of distributed resources and \$20.99M for grid modernization enabling costs for distributed resources.⁴⁴ These incremental costs seem to mirror those shown in Appendix L. Appendix L shows nameplate capacity of 25.63MW for distributed battery storage, with a market potential of 0.03 MW for battery storage for income-eligible customers, as noted above.⁴⁵

D. Distributed Solar Programs

53. PSE’s potential new distributed solar programs are described in Chapter 4 of the CEIP (Specific Actions), and include possible leasing programs, similar to the battery storage leasing program.⁴⁶ Whereas the Draft CEIP contained a separate discussion of distributed solar for vulnerable populations, the Final CEIP does not appear to. The distributed solar program includes rooftop solar leasing of solar photovoltaic assets owned either by PSE or a third-party

⁴¹ Appendix D-1, p. 9.

⁴² Appendix D-1, p. 9.

⁴³ Corrected Appendix L shows an estimated budget of \$12.5M for distributed storage programs (“specific actions and benefits,” row 37).

⁴⁴ Appendix E2, worksheet 7 “incremental costs.”

⁴⁵ Appendix L, “specific actions and benefits” worksheet, row 37.

⁴⁶ Final CEIP, Chapter 4, Distributed Solar Programs, pp. 122 - 128.

for multi-family buildings, residential (mass market and income eligible) customers, and commercial and industrial customers.

54. The Energy Project has several concerns and comments with regard to the various aspects of the distributed solar program.

1. Multi-family solar

55. The distributed solar program is expected to include multi-family buildings and residences, through two programs described as follows:

Multi-family Rooftop Solar Incentive: PSE will offer incentives to multi-family building owners to reduce their upfront cost to install and own solar in PSE's service territory.

Multi-family Solar Partnership: PSE will coordinate with technology providers and provide billing support systems to spread production across tenant units to facilitate solar photovoltaic (PV) installation on multi-family buildings.⁴⁷

56. Further descriptions of these multi-family solar programs are provided in Appendix K (Black & Veatch DER Cost and Market Potential Assessment). That report explains that with the multi-family solar incentive program, resource costs are borne by the customers or landlord.⁴⁸ Under the multi-family solar partnership program, PSE facilitates solar installation with enablement technology, while the "multi-family building customer(s) or landlord owns and maintains the system."⁴⁹

57. Costs borne by landlords presumably would be passed on to tenants, who may well include highly impacted communities and vulnerable populations, thus increasing burdens, not reducing them. This is a significant concern. It is quite possible that rental costs for housing

⁴⁷ Final CEIP, p. 123.

⁴⁸ Final CEIP, Appendix K, p. 20.

⁴⁹ *Id.*, p. 20.

may increase for named communities as a result of this program concept, and housing costs may not track or included as a customer benefit indicator. This illuminates an area of possible risk and harm to named communities that must be considered as part of this review of PSE's CEIP. If it wishes to explore solar for multi-family units, PSE should explore options that do not include charges to landlords.

2. Residential rooftop solar leasing

58. The residential rooftop solar leasing program is contemplated to include utility owned assets (solar PVs). PSE would lease rooftop space from residential customers in exchange for installation of the solar PV.

59. The CEIP states,

Residential Rooftop Solar Leasing -- mass-market and income-eligible: PSE will lease rooftop space from residential customers to install and operate solar photovoltaic systems. This DER approach will allow customers to participate in and benefit from clean energy generation without any investment.⁵⁰

60. The Energy Project's comments to PSE on the Draft CEIP expressed significant concern with the leasing concept, stemming predominantly from the lack of clarity regarding the flow of payments and credits, and whether customers would face net increased costs from the solar lease. While the Final CEIP makes some clarifications, many of our concerns and questions regarding this program concept remain.

61. There are uncertainties about the actual impact on vulnerable customers. As presented, under this program concept residential customers would receive payments from PSE (credits) for leasing of their rooftop, a concept which has some appeal on the surface. With regard to the

⁵⁰ Final CEIP, p. 123.

solar leasing concept for “income eligible” customers, however, the CEIP does not expressly explain any program design elements for these customers.⁵¹ Appendix K sheds some light on this issue. The study identifies this program concept as rooftop solar leasing “targeted towards the vulnerable populations/low income residential customers.”⁵² The study further states that, “[r]ooftop leasing payments were assessed to provide a higher rate to customers than those in Concept #20 [residential rooftop solar].”⁵³ However, this DER study also appears to include program concepts that have not been brought forward to the CEIP, such as “Concept #23 - Residential Solar Rent-to-Own – Vulnerable Population/Low Income.”⁵⁴ As this reflects, PSE’s ultimate plans regarding DER are still concepts at this point, and won’t be determined until the conclusion of the Targeted DER RFP that is pending.⁵⁵ This makes it hard for stakeholders and the Commission to evaluate the program.

3. The “Specific Actions” description regarding solar leasing is inadequate

62. Although solar leasing residential customers would not incur upfront investment in solar, or apparently ongoing costs, the programs may be quite costly. Both the residential solar leasing for “income eligible customers” and “mass market customers” have two of the highest capacity costs, according to PSE’s DER suite selection evaluation.⁵⁶ In addition, the CEIP refers to the “complex billing” systems needed for these DER programs, as well as other DER enablement

⁵¹ The “PSE customer-sited solar+storage offering” mentions that PSE “may offer higher incentives to income-eligible customers,” but this same noncommittal language is not used to describe the residential solar leasing program concept. Final CEIP, p. 123.

⁵² Appendix K, p. 21.

⁵³ Appendix K, p. 21.

⁵⁴ Appendix K, p. 22.

⁵⁵ Final CEIP, Chapter 3, pp. 51-65.

⁵⁶ Residential solar leasing-income eligible has the second highest capacity cost (\$22.47), and residential mass market solar leasing the fourth highest (\$18.42) of the 21 options evaluated. Appendix D-1, p. 6.

expenses. Appendix L mentions “DER work enablement work streams, strategic procurement, customer, and operations” at a cost of \$34.16 million, which includes enhancements to the customer relationship management (CRM) and complex billing system upgrades.⁵⁷

63. Regarding the “Specific Actions” to be taken for implementation, similar to the concerns we discussed earlier regarding the battery storage leasing program, the CEIP lacks clarity and detail regarding exactly how (and whether) the residential solar leasing program would reduce burdens for and provide benefits to vulnerable populations and highly impacted communities. The Draft CEIP contained a separate section on distributed solar for vulnerable populations, but the Final CEIP does not. In addition, the program description of the residential solar leasing program in the CEIP only references “income eligible” customers, not vulnerable populations and highly impacted communities. While income is an important factor, the description and definitions of highly impacted communities and vulnerable populations encompasses more than just income, as discussed in Chapter 3 of the CEIP.

64. PSE asserts “[t]hese DER solar programs bring additional renewable solar generation to PSE’s service territory and contribute to an equitable distribution of energy and non-energy benefits by reducing burdens to vulnerable populations and highly impacted communities.”⁵⁸ But simply making this statement, without sufficient explanation and detail, does not make it true. The CEIP lacks any discussion or explanation of specific actions PSE plans to take to reach vulnerable populations and highly impacted communities through the distributed solar programs.

⁵⁷ Appendix L, Corr. 2/1/2022, “specific actions and benefits” sheet, row 41 (\$34.16M), and “specific actions and tasks” sheet, rows 95-107.

⁵⁸ Final CEIP, p. 123.

65. The CEIP includes three paragraphs describing the customer benefits of the distributed solar programs, at page 124 of the Corrected CEIP filed February 1, 2022. As a general matter, this section makes several high-level statements that appear aspirational or even elusive, rather than supported by program specifics and explanation within the body of the CEIP. Notably, the explanation of customer benefits for the distributed solar programs includes no explicit mention of reducing energy burden or affordability, only a reference to “affecting the affordability of clean energy,” which seems rather vague.⁵⁹

66. Another benefit identified related to the multi-family solar programs is that they will “create pathways for tenants to see the financial benefit of adopting solar.”⁶⁰ This too is a somewhat cryptic and unclear statement, given that tenants will presumably face difficulty adopting solar independent of their landlords. As we noted above, it seems very possible that landlords would pass the increased costs related to these programs on to tenants, thereby increasing harm, not reducing it. This lack of clarity in PSE's CEIP and lack of clear demonstration of commitment to reducing burdens and providing equitable distribution of benefits for named communities is concerning.

E. Community Solar

67. In contrast to the ambiguity and general uncertainty regarding the solar leasing programs, the CEIP offers more clarity in describing plans for Community Solar in Chapter 4 (Specific Actions). In the Community Solar section of the CEIP, PSE states, “Given the limited market potential of other DER concepts focused on highly impacted communities, the expansion of

⁵⁹ Final CEIP, p. 124.

⁶⁰ *Id.*

community solar enables PSE to provide an option for customers who may not have the ability to install solar at their home or business.”⁶¹ This seems to be an acknowledgement of the greater potential that community solar offers in terms of conferring benefits to highly impacted communities and vulnerable populations. The CEIP very clearly identifies “burden reduction” among the benefits of the community solar initiative.⁶² PSE describes plans to enroll 4,300 customers through an initial offering in 2022, and 1,200 of those customers will be income-eligible customers enrolled at no cost.⁶³

68. The community solar program has a nameplate capacity of 25.6MW, which is a larger scope than expected generation from residential solar leasing. While the Final CEIP does not include a separate discussion of distributed solar for vulnerable populations or identification of market potential, as the Draft CEIP did, Appendix D-1 describes market potential of 4.9 MW for residential solar leasing (“mass market”) and 0.7 MW for income-eligible customers.⁶⁴

F. Alternatives

69. A final point is worth making regarding the proposed battery storage and solar DER leasing programs for residential customers, including income-eligible customers. The Energy Project recognizes that these programs are anticipated by PSE to contribute to managing local and system peaks and to meeting peak capacity. The Energy Project recommends that PSE consider whether direct load control (DLC) programs might represent a more straightforward and cost-effective means of achieving those goals. We observe that Appendix L does include five

⁶¹ Final CEIP, p. 128.

⁶² Final CEIP, p. 129.

⁶³ *Id.*

⁶⁴ Appendix D-1, p. 8.

DLC programs as part of its DR target, with a total expected cost of \$5.3 million.⁶⁵ Perhaps some of these DLC programs can be expanded. In addition, none of the DLC programs appear to mention inclusion of income-eligible or vulnerable populations, another potential area for further consideration.

IV. OTHER ISSUES

A. Low-income Affordability Measures Are Appropriate For CEIP and CBIs

70. PSE's final CEIP does not include any of the TEP recommendations for CBIs directly related to immediate financial impacts of the cost of clean energy transition, including bill assistance programs, arrearage tracking, disconnection tracking, and credit scoring. PSE had originally included some tracking of bill assistance participation in an Energy Benefit CBI and metric in the draft CEIP.⁶⁶ This was removed in the Final CEIP. It is TEP's understanding from discussions with the Company the PSE does not believe these matters are appropriate for CBIs or metrics because they are not related to resource planning.

71. The Energy Project does not agree with the Company's position on this issue. It is widely understood that the transition to clean energy is likely to have the effect of increasing energy costs for many customers and that result will fall most heavily and disproportionately upon low-income, vulnerable populations and highly impacted communities. The PSE CEIP itself states: "Overall, CETA is expected to increase customers' bills over time."⁶⁷ For this reason, CETA was intentionally designed to not only accelerate the transition toward renewable and non-emitting clean energy, but also to ensure that the transition is equitable. In enacting

⁶⁵ Final CEIP, Appendix L, "specific actions and benefits," rows 24-29.

⁶⁶ Draft CEIP, Appendix H, p. 6.

⁶⁷ Final CEIP, Appendix H, p. 4

CETA, the Legislature expressly incorporated as policy goals the “reduction of costs”⁶⁸ and the provision of “stable and affordable rates” for electricity rates,”⁶⁹

72. While the CEIP is certainly about resource planning, it is also about resource planning that takes customer impact into account in a new way. This is clearly reflected in the statutory elements which must be addressed in the development of the CEIP, including customer benefit indicators which include indicators for “cost reduction”, by definition a financial measure relating to affordability.

73. Customer Benefit Indicators are just that – measures of *customer* benefit. The Energy Project’s recommended CBIs are intended to measure the financial impacts of the clean energy transition as experienced directly by customers. In TEP’s view, if customer households are experiencing increased rates of disconnection, or growing arrearages, or declining levels of bill assistance, or increasingly poor credit scores, it is hard to conclude that those customers are experiencing benefits from the clean energy transition.

74. Notably, PSE itself includes “affordability” of clean energy as a CBI⁷⁰ relevant for both Cost Reduction and Reduction of Burden, and proposes to measure affordability by tracking reductions in median electric bills. PSE cannot reasonably argue at the same time that the affordability related indicators proposed by TEP and the Joint Advocates are beyond the scope of the CEIP. Affordability is also directly reflected in arrearage levels, disconnection rates, bill assistance participation, and credit scores.

⁶⁸ RCW 19.405.010(6).

⁶⁹ RCW 19.405.010(4).

⁷⁰ Final CEIP, Table 3-6, p. 68.

75. Indeed, PSE lists “arrearages/disconnections” in the CEIP in Tables 3-1 as one “primary factor” identified for vulnerable populations, defined as “percentage of customers in arrearage/disconnected per block group.” In Table 3-2, PSE lists the data sources for the arrearage/disconnection factor as the “PSE Customer Information System”, which is available at the customer level. Customers “in arrears” is included in the statistical ranking in Table 3-3. In Table 3-4, arrearages/disconnections is a factor included for comparison between the PSE service area and statewide populations. For reasons that aren’t clear, PSE lists the percentage of customers in arrears in its service area as “Forthcoming.” This is surprising since PSE has been reporting this data to the UTC on a monthly and quarterly basis, by census block, since December 2020 pursuant to the Commission orders in the COVID-19 response docket U-200281.⁷¹

76. The JA proposed metrics are valid metrics that should be included in the CBI framework for the Company.

B. Process Concerns

77. The Commission’s CEIP rules require significant consultation by the Company with its Advisory Groups in the development of the CEIP, which would include PSE’s Energy Efficiency and Low-Income Advisory Groups.⁷² The Energy Project’s experience and perception to date is that consultation with these Advisory Groups has been relatively limited. Consistent with the rule, TEP had hoped that the recommendations which the Advisory Group members have submitted, including the Joint Advocate CBI recommendations, would receive further discussion

⁷¹ Order 01, October 20, 2020, ¶¶ 29-30, for discussion and decision regarding zip code level data reporting.

⁷² WAC 480- 100-655(1).

in the Advisory Groups and serious consideration for inclusion in the final CEIP. Although TEP met with PSE on December 2, issues were only addressed at a high level, and PSE expressed the view noted above, that CBIs regarding bill assistance, arrearages, and disconnections were not sufficiently related to resource planning and were beyond the scope of the CEIP.

78. TEP is disappointed in the somewhat cursory response of PSE to the Joint Advocates detailed CBI recommendations and written comments. WAC 480-100-655(1) and (1)(h)(i) requires companies to specifically address stakeholder recommendations and explain reasons for not adopting recommendations. Appendix C-2 discusses TEP's comments on CBIs in the Draft CEIP, but in fairly generalized terms with inadequate explanations of why PSE did not use TEP's CBI proposals, and without clear identification of adopted provisions.

V. CONCLUSION AND SUMMARY OF RECOMMENDATIONS

79. The Energy Project respectfully recommends that the Commission condition approval of the PSE CEIP on adoption of the following additional CBIs and metrics, listed by statutory benefit element:

Reduction in Burdens

CBI: Reduction in number of customers suffering from high energy burden.

Metric: (1) Track energy burden for customers in vulnerable populations and highly impacted communities, and participants in bill assistance programs; (2) Expand translation services.

Reduction in Cost

CBI: Reduction in number and amount of arrearages.

Metric: Reduction in number and percentage of residential customers with arrearages of 90 days or more, with breakouts by zip code/census tract, renters, vulnerable populations and highly impacted communities, known low-income and BIPOC communities.

CBI: Expand bill assistance and energy efficiency program resources.

Metrics: (1) increase participation and penetration rates, including in vulnerable populations and highly impacted communities; (2) increase annual program budgets and utilization rates.

Energy Security

CBI: Reduced residential disconnections.

Metrics: (1) Reduced number and percentage of residential disconnections; (2) Reduced disconnections measured by location and demographic information (zip code/census tract), renter, know low-income, vulnerable populations and highly impacted communities).

CBI: Improved access to clean energy (same as PSE CBI).

Metric: Increased number of low-income, vulnerable populations and highly impacted communities with storage, back-up, and/or locally powered centers for emergencies.

Reduction in Risk

CBI: Reduction in number of customers with low utility credit scores, reduced number of customers sent to collection.

Metrics: (1) reduction in number and percentage of customers in the two lowest tiers of the utility credit scoring system; (2) utility assessment and review of credit code scoring system; (3) reduction in number and percentage of customers sent to collection, with tracking of low-income, vulnerable populations and highly impacted communities.

Resilience

CBI: Reduced frequency and duration of blackouts or brownouts in targeted communities.

Metric: Reduction in SAIDI and SAIFI for low-income, vulnerable populations and highly impacted communities, and communities with a history of long loss of service, analyzing geographically targeted data (e.g., at the census tract level).

Energy Benefits

CBI: Improved energy efficiency for low-income housing stock

Metrics: (1) conversion to energy efficient appliances, and (2) expanded energy efficiency in rental residential housing stock.

CBI: Access to an increased number of renewable or non-emitting distributed generation (DG) resources

Metrics: Increase in the number of DG and renewable energy projects for low-income, vulnerable populations and highly impacted communities.

80. The Energy Project also respectfully requests that PSE be required to improve the linkage between its identified Specific Actions and its Customer Benefit Indicators. Finally, TEP recommends that PSE be required to improve engagement with its Advisory Groups in the CEIP process.

Respectfully submitted,

81. DATED this 2nd day of March, 2022.

Simon J. ffitch

/s/ Simon J. ffitch, WSBA No. 25977
Attorney at Law for The Energy Project

/s/ Shawn Collins
SHAWN COLLINS
DIRECTOR
THE ENERGY PROJECT
A PROGRAM OF OPPORTUNITY COUNCIL
3406 REDWOOD AVE. BELLINGHAM, WA 98225
SHAWNC@OPPCO.ORG
CELL: (360) 389-2410

Table 1. Statutory Elements, Joint Advocates' Customer Benefit Indicators (CBI) & Related PSE CBIs

Statutory Element	Joint Advocates' Customer Benefit Indicators (CBI) *	Related PSE CBI **
<u>Energy Benefits</u>	<ul style="list-style-type: none"> Improved efficiency of housing stock in utility service territory, including low-income housing (increased funding, program participation, bill reductions, rental EE) Low income and vulnerable communities have access to an increasing number of renewable or non-emitting distributed generation resources (increased Low-income renewable projects, community-owned projects, increased percent of DG) 	Improved participation in clean energy programs from highly impacted communities and vulnerable populations
<u>Non-Energy Benefits</u>	<ul style="list-style-type: none"> Increase community employment opportunities (apprenticeships and training, living wage jobs, contractor representation) Improved Health and Community wellbeing (work and school absences, weatherization, home comfort w/HVAC, heat pumps, EVs, include NEBS in cost-effectiveness) 	<p>Improved participation in clean energy programs from highly impacted communities and vulnerable populations</p> <p>Increase in quality and quantity of clean energy jobs</p> <p>Improved home comfort</p> <p>Improved community health</p>
<u>Reduction of Burdens</u>	<ul style="list-style-type: none"> Reduction in Number of Energy Burdened Households in target groups (HIC, VP, bill assistance, Known Low Income) Reduced barriers for program participation (increased participation, translation services, EV charging cost equity) 	<p>Improved participation in clean energy programs from highly impacted communities and vulnerable populations</p> <p>Increase in culturally- and linguistically-accessible program communications for named communities</p> <p>Improved affordability of clean energy</p>

Statutory Element	Joint Advocates' Customer Benefit Indicators (CBI) *	Related PSE CBI **
<u>Public Health</u>	<ul style="list-style-type: none"> Improved Health Outcomes (hospital admissions, decreased wood burning, indoor and outdoor air quality, reduced health care costs) 	<p>Improved outdoor air quality Improved community health</p>
<u>Environment</u>	<ul style="list-style-type: none"> Reduction of Greenhouse Gas Emissions (increased electrification) Reduced Pollution Burden and Pollution Exposure (metrics detailed) 	<p>Reduced greenhouse gas emissions Reduction of climate change impacts</p>
<u>Reduction in Cost</u>	<ul style="list-style-type: none"> Expand Bill Assistance Programs (participation rates, penetration rates, program budgets) Reductions in Number and Amount of Arrearages (90+ days, zip code analysis) 	<p>Improved participation in clean energy programs from highly impacted communities and vulnerable populations Improved affordability of clean energy</p>
<u>Reduction in Risk</u>	<ul style="list-style-type: none"> Fewer customers with low utility credit code scores & fewer customers sent to collections Increased Neighborhood Safety (frequency and duration of outages, increased local disaster response capacity) 	<p>Improved access to reliable clean energy</p>
<u>Energy Security</u>	<ul style="list-style-type: none"> Reduced Residential Disconnections (demographic analysis by zip code, AMP and PIPP participation) Improved Access to Reliable Clean Energy (local storage/back up, increased local DG, improved distribution system planning) 	<p>Decrease frequency and duration of outages Improved access to reliable clean energy</p>
<u>Resilience</u>	<ul style="list-style-type: none"> Reduction in Outage Frequency (SAIFI) and Duration (SAIDI) in Target Communities Reduction in Energy and Capacity Need (demand response participation, increased EE savings, water savings) 	<p>Improved participation in clean energy programs from highly impacted communities and vulnerable populations Decrease frequency and duration of outages</p>

* The Joint Advocates' comments filed July 30, 2021 provide further detail regarding specific metrics and components of proposed customer benefit indicators (CBIs). This Table is for summary purposes. ** Some CBIs in the PSE CEIP are listed multiple times if they pertain to more than one of the statutory elements or Joint Advocates' CBIs.

Table 2 to The Energy Project Comments on
PSE's CEIP
March 2, 2022

Table 2. Summary of Extent to which PSE's CEIP Addresses the Joint Advocates
Proposed Customer Benefit Indicators (CBIs)

CATEGORY	JA CBIs	JA METRICS	DID PSE PROPOSE THIS, TOO?
ENERGY BENEFITS	Improve efficiency of housing stock in utility service territory, including low-income housing:	Increased funding of efficiency programs targeted to low income, both owner and renter.	No
		Increased participation in programs	Yes (CBI 1)
		Reduction in bills due to actions taken to improve efficiency.	Partially (CBI 1)
	Low income and vulnerable communities have access to an increasing number of renewable or non-emitting distributed generation resources:	Increase number and percentage of appliances converted to efficient models.	No
		Improvement and expansion of EE in rental housing stock.	Partially (CBI 1)
		Increase in number of distributed and community renewable projects.	Partially (CBI 1)
NON-ENERGY BENEFITS	Community Employment opportunities:	Increase in number of community groups and households that own renewable energy projects.	No
		Increased percentage of electricity generated by distributed renewable energy projects.	Yes (CBI 1)
		Increased number of local low-income and vulnerable population representation in clean energy apprenticeships and/or training programs in the state	Partially (CBI 2)
	Health and Community well-being:	Increase in number of living wage/union jobs sustained.	Partially (CBI 2)
		Increased representation of low-income and vulnerable communities for contractors selected in local program delivery	Partially (CBI 2)
		Reduced number of school and work absences due to illness triggered by poor air quality in highly impacted communities.	Partially (CBI 9)
REDUCTION OF BURDENS	Reduction in number of customers suffering from high energy burden by:	Improved housing conditions: health and safety outcomes related to weatherization measure installation.	Partially (CBI 3)
		Improved comfort in home (for example, customers' ability to heat/cool as needed, with efficient heat pump technology) due to more affordable bills.	Yes (CBI 3)
		Increase in number of customers with access to electricity as a transportation fuel in highly impacted communities.	No
	Reduced barriers for program participation:	Increase in number of customers with access to electricity as a transportation fuel in highly impacted communities.	Partially (CBI 3)
		Increased incorporation of non-energy benefits in utility cost-effectiveness analyses, particularly for low-income weatherization measures and programs.	Partially (CBI 3)
		customers in highly impacted communities;	Partially (CBI 5)
PUBLIC HEALTH	Improved Health outcomes:	customers in vulnerable populations;	Partially (CBI 5)
		participants in bill assistance programs;	Partially (CBI 1)
		known low-income customers; and	No
	Improved Health outcomes:	other residential customers with high energy burden.	Partially (CBI 5)
		Increased participation in bill assistance, weatherization, and energy efficiency programs and grant opportunities.	Partially (CBI 1)
		Expand translation services	Yes (CBI 4)
Improved Health outcomes:	Reduction in cost disparities between customers who have access to EV charging at home on a residential rate and customers who do not have access to EV charging at home	No	
	Reduction of hospital admissions for asthma.	Partially (CBI 9)	
	Decreased wood use for home heating.	No	
	Improvements in indoor and outdoor air quality in communities that experience poor air quality due to pollution.	Partially (CBI 8)	
Improved Health outcomes:	Reduction in health care cost burden and reduced health care bills.	No	

ENVIRONMENT	Reduction of GHG emissions:	Continuous reduction in overall greenhouse gas emissions in the utility service area.	Partially (CBI 6)
		Increased electrification (gas to electric conversions).	No
		Increased electrification of medium- and heavy-duty transport and utility maintenance fleets, and last-mile delivery fleets that serve or operate in highly impacted communities.	No
		Increased electrification of transit services.	No
	Reduced Pollution Burden and Pollution Exposure:	Decrease in share of population and pollution burden, by race/ethnicity, geography and all customer groups (e.g., income level, frontline community, senior citizens, medically vulnerable, rural/ urban, renter/homeowner, race, gender, ability/disability, language spoken, etc.).	No
		Decrease in air pollution exposure index, by race/ethnicity and all other customer groups.	No
		Reduction of particulates from fossil fuel burners in targeted neighborhoods.	Partially (CBI 8)
	Reduction in airborne particles in neighborhoods next to rail lines that transport coal.	Partially (CBI 8)	
	Improved air quality due to reduction in diesel particulate emissions.	No	
REDUCTION IN COST	Expand Bill Assistance Programs:	Increase participation rates, including among highly impacted communities, vulnerable populations, and all eligible customers	Yes (CBI 1)
		Increase penetration rates (portion of those eligible participating) overall and among highly impacted communities and vulnerable populations	No
		Increase annual program budget showing increases over prior years	No
		Increase in customers avoiding disconnection (i.e. customers who fall behind, but are ultimately spared disconnection due to assistance)	No
	Reductions in Number and Amounts of Arrearages:	Reduction in number and percentage of residential customers with arrearages 90+ days—with breakout for customers by zip code/census tract, renter, highly impacted communities, vulnerable populations, known low income, and BIPOC communities	No
REDUCTION IN RISK	Fewer customers with low utility credit code scores / fewer customers sent to collections:	Reduction in number and percentage of residential customers with the lowest and second lowest utility credit code scores	No
		Utility assessment and review of its credit code score system.	No
		Reduction in number and percentage of customers sent to collections for residential customers, including customers in highly impacted communities	No
	Increase Neighborhood Safety:	Reduction in frequency and length of outages due to major disasters, wildfires, and extreme weather events through cost-effective investments to reduce risk.	No
		Increased capacity of local community to respond to local disasters or weather events.	No
ENERGY SECURITY	Reduced Residential Disconnections:	Reduction in number and percentage of residential customer disconnections.	No
		Reduction in number and percentage of residential customer disconnections by location (and demographic info) of residential customer disconnections (zip code/census tract; renter; known low-income; highly impacted communities; and BIPOC customers).	No
		Reduction in risk of disconnection as evidenced by increased participation in arrearage management and Percentage of Income Payment programs.	No
	Improved access to reliable clean energy:	Increase number of neighborhoods with storage/backup/locally powered centers for emergencies.	Partially (CBI 10, CBI 11)
		Increase distributed generation in low-income neighborhoods.	No
	Optimize grid investments on the distribution system through increased distribution system planning.	No	
RESILIENCE	Reduce frequency and duration of blackouts or brownouts in target communities:	Improve SAIDI and SAIFI, particularly in communities that have experienced long loss of service in the past.	Partially (CBI 10)
	Reduction in energy and capacity need:	Increased participation in targeted demand response, load management, and behavioral programs that result in a measurable reduction to peak demand.	Yes (CBI 1, CBI 10)
		Increased acquisition of energy efficiency savings.	No
		Increased water savings due to water efficiency measures.	No

Please refer to the table below for how Table 2 numbers PSE's CBIs (based upon PSE's presentation in Table 3-6 of the CEIP)

PSE CBI	Number Assigned	PSE Metric
Improved participation in clean energy programs from highly impacted communities and vulnerable populations	1	Increase number and percentage of participation in energy efficiency, demand response, and distributed resource programs or services by PSE customers within highly impacted communities and vulnerable populations
		Increase percentage of electricity generated by distributed renewable energy projects
Increase in quality and quantity of clean energy jobs	2	Increase quantity of jobs based on: Number of jobs created by PSE programs for residents of highly impacted and vulnerable populations, number of local workers in jobs for programs, number of part-time and full-time jobs by project
		Increase quality of jobs based on: Range of wages paid to workers, additional benefits offered, and demographics of workers
Improved home comfort	3	Increased dollar in net present value (NPV) in NEI benefits for EE programs
Increase in culturally- and linguistically-accessible program communications for named communities	4	Increase outreach material available in non-English languages
Improved affordability of clean energy	5	Reduce median electric bill as a percentage of income for residential customers
		Reduce median electric bill as a percentage of income for residential customers who are also energy burdened
Reduced greenhouse gas emissions	6	Reduce PSE-owned electric operations metric tons of annual CO ₂ e emissions
		Reduce PSE contracted electric supply metric tons of annual CO ₂ e emissions
Reduction of climate change impacts	7	Increase in avoided emissions times the social cost of carbon
Improved outdoor air quality	8	Reduced regulated pollutant emissions (SO ₂ , NO _x , PM _{2.5})
Improved community health	9	Reduce the occurrence of health factors like hospital admittance and work loss days
Decrease frequency and duration of outages	10	Decrease the number of outages, total hours of outages, and total backup load served during outages using SAIDI and SAIFI
		Reduction in peak demand through demand response programs
Improved access to reliable, clean energy	11	Increase number of customers who have access to emergency power