

**EXH. LCM-1T
DOCKET UE-210795
2022 PSE CEIP
WITNESS: LAUREN C. MCCLOY**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

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

Docket UE-210795

**PREFILED RESPONSE TESTIMONY (NONCONFIDENTIAL) OF
LAUREN C. MCCLOY
ON BEHALF OF NW ENERGY COALITION AND FRONT AND CENTERED**

October 10, 2022

**NW ENERGY COALITION AND FRONT AND CENTERED
PREFILED RESPONSE TESTIMONY (NONCONFIDENTIAL) OF
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CONTENTS

LIST OF EXHIBITS.....	ii
INTRODUCTION	1
Summary of NVEC and Front and Centered Testimony	4
CETA and CEIP Vision	5
CETA’s Equity Mandate.....	8
Customer Benefit Indicators	15
Public Involvement and Accessibility	27
Clean Energy Targets and Modeling Assumptions	31
Incremental Cost	33
Specific Actions	37
Customer-Side Resources	41
CONCLUSION.....	50

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LIST OF EXHIBITS

Exh. LCM-2	Professional Qualifications for Lauren C. McCloy
Exh. LCM-3	Final settlement stipulation in PSE's General Rate Case (Docket UE-220066/UG-220067/UG-210918)
Exh. LCM-4	PSE Response to NWEC DR No. 160
Exh. LCM-5	Testimony of Josh B. Keeling (Exh. JBK-1T) in PSE's General Rate Case (Docket UE-220066/UG-220067/UG-210918)
Exh. LCM-6	PSE Response to NWEC DRs No. 152 and 154

1 **INTRODUCTION**

2 **Q. Please state your name, title, and business address.**

3 **A.** My name is Lauren C. McCloy, and I am the Policy Director for the NW Energy
4 Coalition (“NWEC”). My business address is 811 1st Ave., Suite 305, Seattle, WA
5 98104.

6 **Q. Please describe your background and experience.**

7 **A.** As Policy Director for NW Energy Coalition, I support and guide the Coalition’s policy
8 work in Washington, as well as Oregon, Idaho, and Montana, and also our work on
9 regional and federal issues, including regional planning, markets, and federal
10 infrastructure funding. Previously, I worked as Senior Policy Advisor to Governor Jay
11 Inslee, where I led and managed a broad range of issues in support of the Governor’s
12 energy priorities, including the Clean Energy Transformation Act, Climate Commitment
13 Act, Environmental Justice issues, and elements of the state’s response to the COVID-19
14 pandemic. Prior to serving in that role, I was the Legislative Director for the Washington
15 Utilities and Transportation Commission (“UTC” or “Commission”), where I served as
16 the Commission’s liaison to the state Legislature and the Governor’s office, coordinated
17 the UTC’s legislative activities, and advised Commissioners on energy policy and
18 legislative issues. Before joining the UTC’s policy staff, I worked as a Compliance
19 Investigator in the UTC’s Consumer Protection Division. My background and first-hand
20 experience are the basis for my expertise and qualifications to testify as an expert on the
21 issues raised in my testimony.

22 I completed Utility Regulation 101 training with the National Regulatory
23 Research Institute in 2015 and Rate Spread and Rate Design training with EUCI in 2016.

1 I have a B.A. from the University of North Carolina at Chapel Hill and an M.S. in
2 International Development from Tulane University Law School. My CV is included as
3 Exh. LCM-2.

4 **Q. Please describe NW Energy Coalition’s interest in this case.**

5 A. NWEC is a non-profit organization under section 501(c)(3) of the Internal Revenue
6 Code. NWEC’s primary purpose is to promote an energy future that is clean, reliable,
7 affordable, and equitable. NWEC provides technical and policy leadership on energy
8 issues in the Northwest, and seeks to promote the development of renewable energy,
9 energy conservation, and affordable energy services. Due to its historic and ongoing work
10 with utility companies and others to achieve these goals, NWEC possesses a substantial
11 interest in the outcome of this proceeding.

12 NWEC has a special interest in this proceeding for several reasons:

13 1. NWEC has an interest in ensuring that PSE’s Clean Energy Implementation Plan
14 complies with Washington’s climate and clean energy policies, including but not limited
15 to the Clean Energy Transformation Act (“CETA”).

16 2. NWEC has an interest in facilitating PSE’s equitable transition to clean energy –
17 including ensuring an equitable distribution of benefits and burdens from its investments,
18 with a specific focus on affordability for low- and moderate-income customers,
19 vulnerable populations, and highly impacted communities.

20 3. NWEC has an interest in ensuring that PSE is enabling customer-side resources,
21 including making prudent investments on its distribution system and procuring cost-
22 effective demand response, energy efficiency, and distributed energy resources.

23 **Q. What is the scope and structure of your testimony?**

1
2 A. I begin by providing a summary of the testimony of the witnesses sponsored by NWECC
3 and Front and Centered, organizations jointly intervened in this proceeding.

4 As an overview, I next address NWECC and Front and Centered's vision for what
5 CETA implementation and PSE's CEIP should look like, including a summary of the
6 ways in which PSE's CEIP is consistent with that vision and the ways in which it falls
7 short.

8 Next, I address seven specific topics and the ways in which PSE's CEIP should be
9 modified to meet CETA's goals and requirements in each.

10 First, I discuss why PSE's CEIP does not fulfill CETA's equity mandate.

11 Second, I discuss why PSE's proposed Customer Benefit Indicators (CBIs) and
12 associated metrics are not adequate to measure PSE's progress on ensuring an equitable
13 distribution of benefits and burdens.

14 Third, I discuss changes PSE should make to its CEIP and associated public
15 process to increase public participation and accessibility.

16 Fourth, I discuss PSE's clean energy targets, including problems with the
17 modeling PSE used to support its interim targets.

18 Fifth, I discuss problems with PSE's incremental cost calculation.

19 Sixth, I recommend that PSE change its approach to planning for and including
20 specific actions in its CEIP.

21 Seventh, I recommend changes to PSE's specific actions, including its demand
22 response target and distributed energy resources programs.

1 In conclusion, my testimony provides specific conditions I recommend the UTC
2 include as conditions of approval of PSE's CEIP.

3 **Summary of NWEAC and Front and Centered Testimony**

4 **Q. Please briefly describe the witnesses sponsored by NWEAC and Front and Centered**
5 **and the scope of their testimony.**

6 **A.** In addition to my testimony, which covers the topics outlined in my response to the
7 previous question, NWEAC and Front and Centered are sponsoring four witnesses.

8 Mariel Thuraingham is the Clean Energy Policy Lead with Front and Centered.
9 Her testimony addresses the need for PSE to ensure that its clean energy transition results
10 in an equitable distribution of benefits and burdens to highly impacted communities,
11 vulnerable populations, and low-income customers, and the ways in which PSE's CEIP
12 fails to adequately advance this equitable distribution.

13 Roger Colton is the owner of the firm Fisher, Sheehan, & Colton, Public Finance
14 and General Economics. His testimony addresses the ways in which PSE's CEIP fails to
15 ensure an equitable distribution of benefits and burdens, including issues with PSE's
16 method for designating vulnerable populations and identifying the customers with
17 deepest need; the need for and lack of adequate baseline data, customer benefit
18 indicators, and metrics to measure the impacts of PSE's programs; and the need for PSE
19 to modify its energy efficiency actions to ensure the benefits of its energy efficiency
20 portfolio are equitably distributed.

21 Scott Reeves is the Director at the Cadeo Group on the Distributed Energy
22 Resources ("DER") and Electrification team. His testimony addresses the ways in which
23 PSE should modify the specific actions in the CEIP for demand response, solar, and

1 storage DER to ensure an equitable distribution of benefits to named communities, and
2 the ways in which PSE should change and increase its acquisition of demand response.

3 Elaine Hart is a Founding Principal at Moment Energy Insights LLC. Her
4 testimony addresses two problems with the modeling that PSE used to develop its CEIP:
5 first, the methodology that PSE used to incorporate the social cost of greenhouse gas
6 emissions (“SCGHG”) undervalues clean energy and overvalues fossil fuels; and second,
7 PSE used values for the effective load carrying capability (“ELCC”) of energy storage
8 that undervalue that resource.

9 **CETA and CEIP Vision**

10 **Q. What is NWECC and Front and Centered’s vision for CETA and the CEIP?**

11 **A.** The CEIP is the first step towards achieving an efficient, equitable transition to a 100%
12 clean electricity system. As such, it is critical that the CEIP incorporate three core
13 elements of CETA. First, the CEIP must place equity at the center of a utility’s planning
14 efforts. Second, the CEIP must involve robust public participation beyond what utilities
15 have demonstrated through other planning processes – ultimately, utilities should aim to
16 develop CEIPs that are co-created with the communities they serve. Third, the CEIP must
17 include robust clean energy targets, and specific actions to meet those targets. These
18 specific actions should be concrete, based on the best information the utility has at the
19 time, and should be updated as needed to reflect changing circumstances. These
20 elements, if properly incorporated into the planning goals, process, and outcomes, can
21 drive the transformational change envisioned by CETA.

22 **Q. Please summarize the ways that PSE’s CEIP is consistent with the vision of NWECC**
23 **and Front and Centered.**

1 A. We support the general direction that PSE is heading in its CEIP. We are pleased to see
2 that PSE's CEIP incorporates significant utility-scale renewables, representing 63 percent
3 of PSE's load service obligation. This is a significant leap forward from today, and if
4 implemented, would be the most significant mobilization of clean energy that PSE has
5 ever pursued. We are also encouraged by PSE's first attempt at adopting customer benefit
6 indicators (CBIs) to guide the implementation of the CEIP, and the commitments it has
7 made to innovative outreach and engagement strategies in its Public Participation Plan.
8 And, we are excited to see PSE embrace customer-side distributed energy resources
9 (DERs) as part of its CETA compliance strategy – we hope PSE has continued to pursue
10 these opportunities as more information has become available to the Company from
11 bidders on its All-Source and DER/DR Requests for Proposals (RFPs).

12 **Q. Please summarize the ways in which PSE's CEIP falls short of CETA's goals and**
13 **requirements.**

14 A. PSE's CEIP falls short in a number of critical ways. Some of these shortcomings should
15 be addressed and remedied in this CEIP, as conditions of the Commission's approval.
16 Other issues will take more time to address, and should be identified as conditions for the
17 biennial CEIP update or the 2025 CEIP.

18 First, PSE's CEIP fails to fully meet CETA's equity mandate. PSE must develop
19 a plan to center equity in every aspect of its CEIP and beyond. PSE must work to develop
20 deeper partnerships with and empowerment in named communities; ensure tailored
21 benefits flow to and are controlled by named communities; and create tracking
22 mechanisms that allow named communities to hold PSE accountable to its equity goals.

1 Second, PSE’s proposed Customer Benefit Indicators and metrics are not
2 adequate to measure the equitable distribution of benefits in three specific areas: (1) the
3 category of “energy benefits” to measure the extent to which named communities benefit
4 from PSE’s DER and DR (demand response) programs; (2) the category of “public
5 health” to adequately measure reduced pollution burden and pollution exposure; and (3)
6 the categories of “reduction in cost” and “energy security” to measure reductions in
7 residential disconnections and arrearages.

8 Third, PSE’s public participation processes do not provide adequate opportunities
9 for community members to influence outcomes and specific actions. PSE’s final CEIP is
10 also not easily readable due to its length, technical density, and cross-references.

11 Fourth, the modeling supporting PSE’s clean energy targets undervalues clean
12 energy by failing to fully account for the Social Cost of Greenhouse Gas Emissions and
13 the capacity value of energy storage.

14 Fifth, PSE’s projected incremental cost of compliance with CETA inappropriately
15 includes grid modernization and “emergent electric” expenditures that are not directly
16 attributable to the need to meet CETA’s clean energy standards.

17 Sixth, PSE’s CEIP does not include specific actions, and instead includes generic
18 program concepts. Because PSE does not plan to select specific actions until after it
19 receives the results of its pending Requests For Proposals (RFPs), these significant
20 choices will not be made with the benefit of the public participation and input CETA
21 envisions and requires.

22 Seventh, PSE’s demand response target is too low, based on errors in PSE’s
23 analysis and assumptions. Additionally, PSE’s specific actions, and particularly PSE’s

1 proposed Distributed Energy Resources, do not ensure an equitable distribution of
2 benefits and reduction of burdens to named communities.

3 I explain each of these shortcomings and recommended changes in greater detail
4 below.

5 CETA's Equity Mandate

6 **Q. Please explain the purpose of your testimony as it relates to equitable transition**
7 **issues, and the experience you draw on for your recommendations.**

8 **A.** My testimony on equitable transition issues is intended to characterize CETA's equity
9 mandate and how it should be considered as a part of the Commission's broad public
10 interest standard. My testimony draws on my experience as the policy lead on CETA
11 during my time in Governor Inslee's office, on NWEC's commitment to advance equity
12 in our policy work, and on the comments and testimony of our co-intervenor in this
13 proceeding, Front and Centered, which is a coalition of community-based organizations
14 that serve people of color and with lower incomes.

15 NWEC has made a commitment to advance justice, equity, diversity, and
16 inclusion in our organization and in our advocacy, and has adopted an anti-racism
17 commitment and accountability statement. To fulfill these commitments, we have goals
18 with associated metrics geared towards:

- 19 • Ensuring that policy tables are prepared to meaningfully welcome Black, Brown,
20 and Indigenous leadership as we continue to support capacity among these
21 leaders.

- Reevaluating our policy, program, and decision-making processes so that the organization is supporting efforts that create tangible and near-term benefits to the hardest-hit communities.
- Ensuring our program work elevates partnerships and mutual trust with Black, Brown, and Indigenous organizations working in the clean energy sector.

Q. Why does CETA include an equity mandate?

A. During the development and passage of CETA, stakeholders, including Front and Centered, NWECA, and other environmental groups, strongly advocated for embedding a clear equity mandate into the legislation. In my experience, equity considerations are playing an increasingly important role in the development of policy governing critical sectors of the economy, including the utility sector. With regards to energy policy, equity is being incorporated in response to the disproportionately harmful impacts that energy infrastructure – and disparities of service, access, and ability to pay – have had on named communities, and the need to consider the human experience in our overall public interest considerations.

For example, we know that racial inequities persist in the energy system and underlie other forms of oppression. Specifically:

- The Northwest hydropower system has contributed to cultural and economic harm inflicted on Indigenous communities and ecological collapse of many native and wild fisheries.
- Black, Brown, and Indigenous communities are disproportionately located next to fossil fuel infrastructure and other energy-system-dependent sources of pollution, such as highways and industry, negatively affecting their health.

- 1 • Many Black, Brown, and Indigenous communities pay higher energy bills due to
2 substandard housing and also have not fully benefited from weatherization,
3 energy efficiency services, and other residential DER programs.
- 4 • Rural communities, which are increasingly Black, Brown, Indigenous, and low-
5 income, have not benefited from demand-side resources and other programs in the
6 way that more urban customers have, and also face a lack of access to energy
7 technologies and services enabled by access to a reliable internet connection.
- 8 • There have been racial disparities in access to family wage jobs in the clean
9 energy sector and energy related trades, and this has been particularly true in
10 urban centers.
- 11 • Electric utility customers with large past-due balances are most at risk of potential
12 disconnection from energy service and are most harmed by fees within the
13 dunning process.

14 There are many forms of oppression that affect people in our region beyond
15 racism, including ableism, classism, homophobia, transphobia, and gender-based
16 discrimination. In a public policy context, it is important to be mindful of the
17 intersectional nature of race, economic well-being, geography, and other factors to ensure
18 that policies and institutions do not perpetuate past harms. By requiring an equitable
19 distribution of benefits and reduction of burdens to highly impacted communities and
20 vulnerable populations, CETA seeks to address past harms to a diverse set of named
21 communities, while transitioning to a cleaner, more sustainable, and more just electricity
22 system.

23 **Q. Describe CETA's equity mandate, as you understand it.**

1 A. The key equity policy changes enacted in CETA are: (1) a shift in how the Commission
2 interprets “fair and just” to not necessarily mean “equal,” but to take disparities in current
3 conditions into account; and (2) the *responsibility of the utility* to ensure that all
4 customers are benefiting from the transition to clean energy through the equitable
5 distribution of benefits and reduction of burdens. The main obligation is established in
6 RCW 19.405.040(8):

7 “In complying with this section, an electric utility must ...ensure that all customers
8 are benefiting from the transition to clean energy: Through the equitable
9 distribution of energy and nonenergy benefits and reduction of burdens to
10 vulnerable populations and highly impacted communities; long-term and short-
11 term public health and environmental benefits and reduction of costs and risks;
12 and energy security and resiliency.”

13 In passing CETA, the Legislature declared that it found that Washington can
14 transform its electricity system to clean energy, while also “maintaining safe and reliable
15 electricity to all customers at stable and affordable rates.” RCW 19.405.010(4). Further, the
16 Legislature found that the public interest “includes, but is not limited to: The equitable
17 distribution of energy benefits and reduction of burdens to vulnerable populations and
18 highly impacted communities; long-term and short-term public health, economic, and
19 environmental benefits and the reduction of costs and risks; and energy security and
20 resiliency.” RCW 19.405.010(6) (emphasis added). Additionally, “[i]t is the intent of the
21 legislature that in achieving this policy for Washington, there should not be an increase in
22 environmental health impacts to highly impacted communities.” *Id.*

1 The Commission has defined “equitable distribution” as, “a fair and just, but not
2 necessarily equal, allocation of benefits and burdens from the utility’s transition to clean
3 energy. Equitable distribution is based on disparities in current conditions. Current
4 conditions are informed by, among other things, the assessment described in RCW
5 19.280.030(1)(k) from the most recent integrated resource plan.” WAC 480-100-605.

6 **Q. What does successful implementation of CETA’s equity mandate look like for PSE,
7 in your opinion?**

8 **A.** PSE must center CETA’s equity mandate in its CEIP and associated decisions, but this is
9 only a first step. Successful implementation of CETA’s equity mandate requires a
10 paradigm shift, such that PSE centers equity in every aspect of its company culture.
11 Ultimately, equity must be considered in all of PSE’s planning and business cases, and in
12 every filing reviewed by the UTC. This may seem like a daunting task, but it is essential
13 that PSE set goals and work toward this end. Achieving CETA’s equity mandate is new
14 and complex, but it is reasonable to expect PSE to set the bar for other utilities in the
15 region.

16 **Q. What does it mean to “center equity” in the CEIP?**

17 **A.** As set forth in the testimony of Mariel Thuraisingham, Exh. MFT-1T, PSE’s CEIP must
18 take effective action to achieve equitable outcomes for named communities. PSE must
19 build equity into all aspects of the Company’s planning, including outside of the CEIP.
20 And the CEIP should reflect a paradigm shift towards a service model that builds power
21 in the communities impacted by PSE’s actions and centers transparency, inclusivity,
22 restoration, and community well-being. To accomplish these equity goals, PSE’s CEIP
23 needs to:

- 1 • Establish a data baseline. PSE should study, understand, and acknowledge
- 2 existing disparities within different named communities and PSE’s historical role
- 3 in contributing to those disparities.
- 4 • Set CBIs, metrics, and performance goals adequate to measure PSE’s progress in
- 5 addressing each of those disparities.
- 6 • Tailor PSE’s specific plans to address individual community needs and burdens,
- 7 including by setting targets to deliver a percentage of the energy benefits of PSE’s
- 8 DER programs to the sub-groups of named communities that are most vulnerable,
- 9 and by working towards community-owned generation resources such as
- 10 community solar, rather than solar rooftop leasing.
- 11 • Reshape PSE’s public participation plan to meaningfully empower impacted
- 12 communities, giving them not just access to opportunities to speak, but the power
- 13 to actually influence PSE’s priorities and actions and all of the information
- 14 necessary to do so.
- 15 • Create mechanisms for public reporting and accountability to allow impacted
- 16 communities to hold PSE accountable for implementing the plans co-created with
- 17 community and for achieving the co-created equity goals.

18 **Q. What near-term steps could PSE take to center equity in this CEIP?**

19 **A.** In the near-term, there are several simple steps that PSE could take to begin making

20 progress toward the goal of centering equity in the CEIP and beyond. Some of these

21 initial steps are addressed in the Partial Multiparty settlement stipulation in Dockets UE-

22 220066/UG-220067/UG-210918 (consolidated), which NWECA and Front and Centered

1 signed. Other initial steps I discuss in more detail in subsequent sections of this testimony
2 and in the testimony of the witnesses sponsored by NWECC and Front and Centered.

3 For the CEIP, PSE must develop a deeper understanding of who is impacted by
4 the company's decisions, what those impacts are, and who is not represented in the
5 conventional stakeholder processes, as described in the testimony of Mariel
6 Thuraisingham (Exh. MFT-1T). If conventional stakeholder processes are ineffective at
7 obtaining the information and input that is needed to understand these impacts, then PSE
8 must make changes to its processes. While PSE has developed a baseline understanding
9 of who the highly impacted communities and vulnerable populations in its service
10 territory are, it has yet to truly center those groups in the CEIP process. PSE must reach
11 beyond its typical stakeholders, engage with communities directly on issues that impact
12 them, and bring those perspectives into its CEIP process. PSE should partner with
13 community-based organizations and customers with lived experience in their service area
14 to identify priorities for the energy transition. The DER Public Engagement Pilot I
15 recommend below would be one concrete, near-term step toward this foundational shift
16 in the relationship between PSE and the communities it serves. I also recommend direct
17 consultation with Tribes, who are designated as highly impacted communities in RCW
18 19.405.020(23), and whose interests cannot be represented by any other group.

19 PSE should use the information gained through this engagement to target its clean
20 energy investments, outreach, and programs, as described below and in the testimony of
21 Roger Colton (Exh. RDC-1T). This should include a deeper consideration of the factors
22 that cause populations to be vulnerable, and actions to help address those factors,
23 including specifically tailoring, targeting, and increasing PSE's energy efficiency

1 programs to serve customers with the deepest need. And as described in the testimony of
2 Scott Reeves (Exh. SR-1T), PSE should also tailor, target, and increase its other DER
3 programs to serve named communities, including its solar, storage, and demand response
4 programs.

5 Finally, PSE should also develop and use tools to continually assess and share its
6 progress toward more equitable programs and processes and provide accountability as
7 our collective understanding of how to achieve equity in the energy utility context
8 improves. While the Customer Benefit Indicators, which I address next in my testimony,
9 are an important tool to gauge performance on a range of elements broadly, a more
10 focused effort to evaluate programs and budgets for distributive equity would be helpful.
11 In collaboration with its Equity Advisory Group, PSE could use a tool like the Initiative
12 for Energy Justice’s Energy Justice Scorecard for this purpose.

13 **Customer Benefit Indicators**

14 **Q. Please explain the role customer benefit indicators are supposed to play in a CEIP.**

15 **A.** CETA lists specific customer benefits that utilities must ensure are distributed equitably.
16 These benefits are “energy and non-energy benefits and reduction of burdens” to named
17 communities; “long-term and short-term public health and environmental benefits and
18 reduction of costs and risks;” and “energy security and resiliency.” RCW 19.405.040(8).
19 The requirement that utilities establish and evaluate their actions through CBIs is new,
20 and meant to give effect to CETA’s requirement that utilities ensure that all customers
21 benefit from the transition to clean electricity. *See* WAC 480-100-640(4)(c).

22 CBIs are “attributes” of a resource or related distribution system investment that
23 are associated with one of the specific customer benefits in CETA. WAC 480-100-605.

1 For example, “improved air quality” could be a CBI associated with the statutory benefit
2 “short-term public health.” Utilities must propose at least one CBI for each of the
3 customer benefits enumerated in CETA and the UTC’s implementing rules. WAC 480-
4 100-640(c). A utility must intentionally evaluate each specific action and program in its
5 CEIP through the lens of each CBI and indicate whether and how the CBI is applicable to
6 that action. WAC 480-100-640(5)(c).

7 **Q. Does PSE’s CEIP satisfy the CETA requirement to apply CBIs to all specific actions**
8 **that the utility will take?**

9 **A.** No. PSE has only applied its proposed CBIs to DERs, and has not applied its CBIs to
10 utility scale resources. Without a fair and even application of CBIs to all resources, the
11 CEIP does not comply with WAC 480-100-640, and the CBI evaluation in PSE’s CEIP is
12 incomplete. In addition, PSE inappropriately asked bidders responding to the utility’s
13 DER RFP to opine on whether their projects would positively influence CBIs using
14 PSE’s rudimentary and subjective CBI scoring system. It makes little sense to outsource
15 the application of CBIs to every bidder rather than have the utility—which should be
16 acquiring expertise and understanding of CBIs—be responsible for evaluating each
17 proposal for itself and applying a consistent methodology to that analysis. The flaws in
18 PSE’s CBI scoring system (which I discuss below) compound this error and will lead to
19 arbitrary results. The CEIP does not fulfill PSE’s obligation to analyze the customer
20 benefit offered by each specific action under consideration.

21 **Q. What is your assessment of the sufficiency of the CBIs PSE selected for inclusion in**
22 **the CEIP?**

1 A. PSE’s CBIs fall short of CETA’s requirements because there are significant gaps in
2 PSE’s CBIs, particularly in three areas: (1) the categories of “energy benefits” to measure
3 the extent to which named communities benefit from PSE’s DER and DR programs; (2)
4 the category of “public health” to adequately measure reduced pollution burden and
5 pollution exposure; and (3) the categories of “reduction in cost” and “energy security” to
6 measure reductions in residential disconnections and arrearages. While PSE has
7 proposed CBIs associated with each of CETA’s statutory benefits, PSE’s CBIs contain
8 significant gaps because they do not adequately capture the impact of PSE’s proposed
9 actions, especially on named communities.

10 **Q. With respect to the gaps in PSE’s CBIs, what additional CBIs and metrics are**
11 **necessary to fulfill CETA’s requirements?**

12 A. Prior to this adjudication, a group of “Joint Advocates” comprised of NWECA, The Energy
13 Project (TEP), Front and Centered, and the Public Counsel Unit of the Attorney
14 General’s Office (PCU) prepared a set of CBIs that are more focused, specific, and
15 detailed, and that directly support the CETA statutory elements for which CBIs must be
16 developed, along with appropriate metric indicators that would show the impact of PSE’s
17 actions. The Joint Advocates shared those CBIs and associated metrics with PSE in early
18 summer of 2021, but PSE chose not to adopt them. Adopting some of the Joint
19 Advocates’ CBIs and metrics would fill gaps in PSE’s proposed CBIs.

20 In addition, PSE agreed to additional metrics in the final settlement stipulation in
21 PSE’s General Rate Case (UE-220066/UG-220067/UG-210918) (attached as Exh. LCM-
22 3.) Some of these metrics are more specific than the metrics in the final CEIP; however,

1 none are directional. Adopting these metrics in the CEIP, with added directionality,
2 would also help fill gaps in PSE’s proposed CBIs and metrics.

3 **Q. What additional CBIs and metrics are needed in the category of “energy benefits”**
4 **to adequately measure the extent to which named communities benefit from PSE’s**
5 **DER and DR programs?**

6 **A.** PSE should adopt an additional CBI, “Increased Named Community Clean Energy,” in
7 addition to its proposed CBI of “Improved participation in clean energy programs from
8 highly impacted communities and vulnerable populations.” PSE should also adopt
9 additional metrics associated with both of these CBIs.

10 PSE’s CBI for energy benefits, “Improved participation in clean energy programs
11 from highly impacted communities and vulnerable populations,” is by itself inadequate to
12 assess whether PSE’s actions result in an equitable distribution of energy benefits
13 because it does not account for the magnitude of the energy benefit associated with
14 participation. In theory, under PSE’s CBI, if participation in PSE’s low-income
15 weatherization program doubled, but the average per-household and total program energy
16 savings declined by an order of magnitude or more, PSE’s CBI would indicate progress
17 toward an equitable distribution of energy benefits, despite the fact that energy savings
18 benefits—measured as program totals or by household average—would actually be
19 decreasing. Adding the “Increased Named Community Clean Energy” CBI, and the
20 additional metrics discussed below, will ensure that PSE’s CBIs and metrics actually
21 capture the distribution of energy benefits.

22 PSE should adopt the following additional metrics to accurately measure energy
23 benefits from PSE’s DER programs:

- 1 • An additional metric modeled on ¶ 61(j) of the GRC settlement stipulation:
2 “increase percentage of utility spending on DR, DER, and renewable energy
3 programs that benefits highly impacted communities or vulnerable populations.”
4 This would supplement PSE’s proposed CBI of “Improved participation in clean
5 energy programs from highly impacted communities and vulnerable populations”
6 and PSE’s associated metric of “Increase percentage of participation in energy
7 efficiency, demand response and distributed resource programs or services by
8 PSE customers within highly impacted communities and vulnerable populations.”
9 If PSE increases participation among named communities but doesn’t increase
10 funding allocated to those communities, that would mean that each participating
11 customer in a named community receives fewer benefits. Accordingly, PSE’s
12 CBIs must look at funding directed to named communities, and not just
13 participation.
- 14 • An additional metric that tracks ¶ 64(i) of the GRC settlement: “increase average
15 energy savings per home for customers in highly impacted communities and
16 vulnerable populations taking part in each of PSE’s DER programs.” Similar to
17 the CBI that would focus on program funding, this metric focusing on energy
18 savings would highlight not just levels of program participation in named
19 communities but the magnitude of the energy benefit program participants
20 receive.
- 21 • Two metrics from the Joint Advocates proposal that will reflect the significance
22 and quality of specific energy benefits that customers in hard-to-reach named
23 communities are receiving from PSE’s DER investments: “Increased number and

1 percentage of appliances converted to efficient models in named communities”
2 and “Improvement and expansion of energy efficiency in rental housing stock in
3 named communities.”

- 4 • Four metrics that reflect the extent to which customers in named communities
5 have access to increased control and/or ownership of the energy benefits from
6 renewable distributed generation resources: “Increase total MWh of distributed
7 energy resources 5 MW and under, where benefits and control of the resource
8 accrue to members of named communities;” “Increase total MWs of energy
9 storage resources 5 MW and under, where benefits and control of the resource
10 accrue to members of named communities;” “Increase number (i.e., sites,
11 projects, and/or households) of distributed renewable generation resources and
12 energy storage resources, where benefits and control of the resource accrue to
13 members of named communities;” and “Increase total MWh of energy savings
14 from EE programs, where benefits and control of the savings accrue to members
15 of named communities.” Where known, for each of the preceding four metrics,
16 PSE should specify whether the named community resources are in highly
17 impacted communities and/or vulnerable populations and/or known low-income
18 customers. For vulnerable populations, where known, PSE should specify named
19 community resources broken down by the sensitivity factors and/or
20 socioeconomic factors that led the customer or community to be designated
21 highly vulnerable.

22 **Q. What additional CBIs and metrics are needed in the category of “public health” to**
23 **adequately measure reduced pollution burden and pollution exposure?**

1 A. PSE should adopt an additional CBI, “Improved indoor air quality,” in addition to its
2 proposed CBIs of “Improved outdoor air quality” and “Improved community health.”
3 PSE should also adopt additional metrics associated with its public health CBIs.

4 PSE’s CBIs for public health, “Improved outdoor air quality” and “Improved
5 community health,” are by themselves inadequate to fully assess whether PSE’s actions
6 result in an equitable reduction of pollution burden and pollution exposure. Indoor and
7 outdoor air pollution can have different causes, and can be reduced by different actions.
8 For example, PSE programs that assist customers in upgrading polluting in-home
9 appliances to cleaner, energy-efficient options may have a substantial impact on indoor
10 air quality. Each individual appliance upgrade, however, may have a far smaller impact
11 on outdoor air quality—and that impact may pale in comparison to other actions (such as
12 changes to utility-scale resources). PSE must ensure that the pollution burdens and
13 pollution reduction benefits of all of its programs are shared equitably, and that requires
14 considering indoor and outdoor air quality separately. PSE’s CBI of “Improved
15 community health” cannot substitute for tracking indoor and outdoor air quality
16 separately, because improvements to either standing alone can lead to changes in
17 community health. Understanding the impact of PSE’s actions on indoor air quality
18 requires separate tracking.

19 PSE should adopt three additional metrics to adequately measure improvements in
20 air quality and reduced pollution burden and pollution exposure, and to ensure that those
21 reductions are benefitting the named communities most burdened by pollution:

- 1 • A metric that tracks ¶ 62(c) of the GRC settlement, with added directionality and
2 references to named communities: “Reduced annual SO2 emissions in named
3 communities from utility-owned electric generation resources, by census tract”
- 4 • A metric that tracks ¶ 62(d) of the GRC settlement, with added directionality and
5 references to named communities: “Reduced annual NOx emissions in named
6 communities from utility-owned electric generation resources, by census tract”
- 7 • A metric that tracks ¶ 62(e) of the GRC settlement, with added directionality and
8 references to named communities: “Reduced annual PM2.5 emissions in named
9 communities from utility-owned electric generation resources, by census tract.”

10 Additionally, PSE should engage collaboratively with its advisory groups (LIAC, CRAG,
11 EAG) to create metrics for the “Indoor air quality” CBI and submit the metrics for
12 evaluation no later than in its 2023 CEIP Biennial Update.

13 **Q. What additional CBIs and metrics are needed in the categories of “reduction in
14 cost” and “energy security” to adequately measure reductions in residential
15 disconnections and arrearages?**

16 **A.** PSE should adopt two additional CBIs in the categories of “reduction in cost” and
17 “energy security”: “Reduced residential Arrearages and Disconnections for
18 Nonpayment,” and “Reduced number of Households with a High Energy Burden (>6%).”
19 PSE should also adopt additional metrics associated with both of these CBIs.

20 PSE’s CBI for energy security, “Improved access to reliable clean energy,” is not
21 adequate to assess whether PSE’s actions result in an equitable distribution of benefits
22 and reduction of burdens. Disconnections, and arrearages that put customers at risk for
23 disconnection, represent an acute form of energy insecurity that is not in any way

1 captured by PSE’s CBI or associated metric, which measures the number of customers
2 with access to emergency power. Emergencies that lead to widespread outages, and
3 residential arrearages and disconnections for nonpayment, stem from entirely separate
4 causes, and PSE must consider both to assess whether its actions lead to an equitable
5 distribution of benefits and reduction of burdens.

6 PSE’s CBI for cost reduction, “Improved affordability of clean energy,” is also
7 inadequate by itself to assess whether PSE’s actions result in an equitable distribution of
8 benefits and reduction of burdens. PSE’s CBI and associated metrics measure bill
9 reductions for all customers and energy-burdened customers, but do not capture whether
10 bill reductions are substantial enough to actually reduce the number of customers who are
11 energy burdened.

12 PSE should adopt two additional metrics to accurately measure whether its
13 actions reduce residential arrearages and disconnections:

- 14 • Decreased number and percentage of residential electric disconnections for
15 nonpayment by month, measured by location and demographic information (zip
16 code/census tract, KLI customers, Vulnerable Populations, Highly Impacted
17 Communities, and for all customers in total). If residential disconnections are not
18 already required to be reported quarterly to the Commission in any other docket
19 (e.g., U-200281 or U-210800) or subject to any other reporting rule, PSE should
20 report residential disconnections as reported pursuant to Commission Order 04
21 (Appendix A Third Revised Term Sheet, Section J, Part 2 a)¹, in Docket U-

¹ U-200281, Order 04, Appendix A UTC Staff Third Revised Term Sheet, issued on July 2, 2021.
Disconnection data for Section J, Part 2 is reported quarterly by zip code.

1 200281, on a quarterly basis through the end of this CEIP implementation period
2 (December 31, 2025).²

- 3 • Decreased residential arrearages as reported pursuant to Commission Order 04
4 (Appendix A Third Revised Term Sheet, Section J, Part 8 a-c)³ in Docket U-
5 200281. If residential arrearages are not already required to be reported to the
6 Commission in any other docket (e.g., U-200281 or U-210800) or subject to any
7 other reporting rule, PSE should track the following residential electric data by
8 month, measured by location and demographic information (zip code/census tract,
9 KLI customers, Vulnerable Populations, Highly Impacted Communities, and for
10 all customers in total)⁴ and report the data to the Commission on a quarterly basis
11 through the end of this CEIP implementation period (December 31, 2025)⁵: The
12 number of customers with past-due balances (arrearages); and the amount of past-
13 due balances that are 30+, 60+, and 90+ days past due, and the total amount of
14 arrearages.

15 PSE should also adopt two additional metrics to accurately measure whether its actions
16 reduce the number of energy-burdened households:

- 17 • Decreased number and percent of households with a high energy burden (>6%)

² Data will be reported in this CEIP docket (UE-210795) on a quarterly basis, filed within 30 days following the end of each quarter. For Q4 2025, the data will be filed by January 31, 2026. As with all CBIs and metrics, as required by Commission rule, this CBI and metrics will be reported on in the Biennial CEIP Update and the four-year compliance report.

³ Arrearage data for Section J, Part 2 is reported quarterly by zip code.

⁴ For electric customers that also have natural gas service, this data should include their total arrearages as the Company is unable to separate their electric and natural gas specific arrearages.

⁵ Data should be reported in this CEIP docket (UE-210795) on a quarterly basis, filed within 30 days following the end of each quarter. For Q4 2025, the data should be filed by January 31, 2026.

- Decreased average excess burden per household

Each of these metrics should be separately tracked and reported for all PSE electric customers, known low-income (KLI) customers, Highly Impacted Communities, and Vulnerable Populations. KLI customers are defined as those who have received energy assistance during the prior two years.

Q. Are there any other additional CBIs or metrics you recommend PSE adopt?

A. Yes. As described in the testimony of Roger Colton (Exh. RDC-1T), I recommend PSE develop and adopt metrics to measure housing quality and health impacts from extreme heat.

Q. As a general matter, how should PSE be required to track and report progress on its CBIs and metrics?

A. PSE has committed to a range of CBIs and metrics across different dockets, including this CEIP docket, PSE's pending general rate case, and others. It will be critical to make the information on all of these metrics as accessible as possible, so stakeholders and customers can understand PSE's progress and advocate for different actions where needed. Accordingly, I recommend that PSE be required to incorporate CEIP CBIs and metrics into a publicly accessible comprehensive report card that includes up-to-date data on all metrics that the Company reports to the Commission. This comprehensive report card should include at least: CBIs contained in the filed CEIP, those agreed to in any settlement including any approved General Rate Case settlement, those ordered by the Commission in the final order, and CBIs and metrics to be developed in connection with the Biennial Update or the next CEIP filing. PSE should publish this report card annually

1 on its website on a dedicated page, and send an annual notice to customers as new report
2 cards are published.

3 **Q. Please explain how CBIs and metrics should influence PSE's choice of specific**
4 **actions in its CEIP.**

5 **A.** PSE should use some of its CBIs to help it assess and select specific actions and
6 programs that will further the equitable distribution of benefits that CETA requires. Not
7 all CBIs will be appropriate for resource selection, however. For example, PSE should
8 work to increase culturally and linguistically accessible program communications across
9 all of its programs (including those implemented by contractors), and PSE's CBI tracking
10 the availability of accessible communications should be used to assess PSE's progress in
11 reducing burdens across programs. It would likely be inappropriate, however, for PSE to
12 choose between resources based on the availability of accessible program
13 communications.

14 **Q. Please describe how PSE applied its CBIs in its resource selection process in this**
15 **CEIP.**

16 **A.** PSE considered a range of generic DER programs in this CEIP. PSE used a rough scoring
17 system to assess which programs provided customer benefits as defined by the CBIs.
18 Generally, under PSE's scoring system, a score of 0 meant that a generic program had
19 negative or no impact; a score of 1 meant that a generic program had minimal or no
20 impact, and a score of 2 meant that a generic program had a positive impact. CEIP, Ch. 3
21 at 93, Figure 3-9. PSE applied this scoring to a set of DER generic programs to help it
22 select which to include in the CEIP. CEIP, Appx. D-3.

1 **Q. In your opinion, what changes should PSE make to its CBI scoring methodology, if**
2 **any?**

3 **A.** In my opinion, PSE should significantly revise its method for using CBIs to assist in
4 resource selection. The scoring methodology PSE used in this CEIP is not nuanced
5 enough to meaningfully capture the real-world impact of different DER programs on all
6 customers and on named communities specifically. I believe that the DER Public
7 Engagement Pilot I recommend below for PSE’s DER programs for named communities
8 would allow PSE and the named communities it serves to co-create a method for
9 selecting DER programs based on their relative benefits to individual communities. For
10 resource decisions not included in that pilot, PSE should work with stakeholders and its
11 advisory groups to develop a more nuanced method for applying CBIs in subsequent
12 CEIPs.

13 **Public Involvement and Accessibility**

14 **Q. Please describe PSE’s Public Participation Plan.**

15 **A.** I reviewed PSE’s CEIP Public Participation Plan for the “Implementation Phase”
16 (January 2022 – April 2023).⁶ The Plan includes desired outcomes, goals, and objectives;
17 defines roles and responsibilities; discusses the audiences and public participation tools;
18 and outlines an approach, activities, and general schedule for the implementation phase of
19 the CEIP.

20 **Q. What elements of the plan do you support?**

⁶ See Appendix C-1 to the Final CEIP, starting on page 36.

1 A. In general, there are many elements of the Public Participation Plan that I support. PSE's
2 public participation goals are appropriate, its review of audiences and tools is thorough,
3 and its evaluation plan is sufficient. In particular, I support PSE's efforts to remove
4 barriers to participation, including especially the following strategies: hosting in-language
5 events with translators, compensating people for their participation in multilingual
6 sessions and/or focus groups, pursuing partnerships with community-based organizations,
7 and providing information using common words and short sentences to make the
8 information accessible. PSE's approach demonstrates an understanding of the needs and
9 opportunities in its service territory. If PSE's Public Participation Plan is executed as
10 proposed, this will be a significant improvement on past efforts.

11 **Q. What elements of the plan should be improved going forward?**

12 A. A key missing element of PSE's Public Participation Plan is a commitment to outcomes
13 from PSE's community engagement, to ensure that participation is meaningful and
14 worthwhile for the public. We recommend that PSE make a more concerted effort to
15 listen to feedback from stakeholders in its processes, and to incorporate that feedback by
16 changing its planned actions to meet community needs and priorities. Individuals and
17 organizations dedicate a significant amount of time and resources to participating in
18 PSE's advisory group meetings and public meetings. This investment of time and
19 resources should be rewarded with tangible results in the form of changes to PSE's plans
20 based on their input. PSE should be prepared to make substantive changes to its plans in
21 response to feedback. This will require PSE to fundamentally alter the way it conducts its
22 planning efforts. This evolution will take time.

1 We recommend that PSE begin this process now for the next CEIP by developing
2 and implementing a DER Public Engagement Pilot to gain experience with and
3 understanding of engaging named community members at the “Empowerment” level⁷ in
4 developing DER offerings specifically for named communities. PSE should collaborate
5 with the EAG (Equity Advisory Group), other relevant advisory groups, and stakeholders
6 to develop this pilot. PSE should begin work on the design of the pilot within three
7 months of a Commission order in this docket, and implement the pilot after the 2023
8 Biennial CEIP Update. This pilot should place significant decision-making authority in
9 the hands of the participating named community members. This pilot will represent a
10 substantial transfer of power to communities relative to PSE’s process on this CEIP: PSE
11 states that its engagement with each of its advisory groups in development of the CEIP
12 primarily occurred at the “involve” and “collaborate” levels for the Equity Advisory
13 Group, and the “consult” and “involve” levels for the other advisory groups.⁸

14 Additionally, to ensure more meaningful public participation, PSE, in consultation
15 with the EAG and other stakeholders, should develop a community outreach plan, which
16 includes: (1) facilitating ongoing opportunities for direct interaction between the
17 Company and communities; (2) allocating funding for staff positions trained and
18 dedicated to community outreach and facilitating collaborations; (3) choosing
19 arrangements for community interactions to maximize effective participation, accounting
20 for factors such as meeting times, locations, and translation needs; (4) ensuring that

⁷ International Association for Public Participation Spectrum USA, IAP2 Public Participation Spectrum, available at <https://iap2usa.org/cvs>.

⁸ See Exh. LCM-4.

1 affected individuals and communities have access to sufficient information to enable
2 meaningful participation in activities; (5) ensuring sufficient time for meaningful
3 interaction before decisions are made or unalterable commitments are agreed to; and (6)
4 ensuring transparency in decision-making.

5 **Q. In your view, is PSE’s CEIP broadly accessible to the general public? Explain.**

6 **A.** No. The CEIP should be a concise, succinct, transparent document that details the interim
7 targets, specific targets, and specific actions the utility will undertake in the next four-
8 year period. The CEIP should be easily understandable by the reader, avoid unnecessary
9 cross-references to other documents, and clearly present explanations of the effects that a
10 utility’s specific actions will have on communities, customers, and the electric system.
11 PSE’s CEIP falls short of this goal in many respects. The Plan itself is 233 pages long,
12 with an additional 28 appendices. In multiple instances, it also cross-references technical
13 documents in other dockets. While we acknowledge that a certain level of supporting
14 technical detail is necessary from a compliance standpoint, the CEIP itself should be easy
15 for the general public to understand.

16 **Q. What recommendations do you have to make the CEIP more accessible to the**
17 **general public?**

18 **A.** I recommend that PSE adopt, as appropriate, a set of readability guidelines for its CEIP,
19 like the state of Washington’s guidelines for writing to customers in “Plain Talk”.⁹ The
20 Plain Talk principles are: (1) Understand customer needs, (2) Include only relevant
21 information, (3) Use words your customers use, (4) Use the “active voice,” (5) Use

⁹ <https://www.governor.wa.gov/issues/issues/efficient-government/plain-talk/know-guidelines>.

1 personal pronouns, (6) Keep sentences and paragraphs short, and (7) Design clear pages.
2 I also recommend, for the next CEIP, that PSE significantly reduce the length of the
3 CEIP itself, including only essential information necessary to provide the public a full
4 picture of PSE's plan, and move more of the supporting technical information into
5 appendices. I also recommend that PSE avoid cross-references to documents filed in
6 other dockets.

7 **Clean Energy Targets and Modeling Assumptions**

8 **Q. Please describe the requirement to adopt targets in the CEIP.**

9 **A.** CETA establishes that utilities must serve 100 percent of retail needs with non-emitting
10 and renewable resources by 2030 (with alternative compliance options for up to 20
11 percent). RCW 19.405.040. By 2045, non-emitting and renewable resources must supply
12 100 percent of all retail sales. RCW 19.405.050. Beginning in 2022, utilities must
13 propose interim targets for meeting the 2030 standard in each CEIP, including specific
14 targets for energy efficiency, demand response, and renewable energy. RCW
15 19.405.060(1)(a)(i)-(ii).

16 **Q. Do you believe that PSE's proposed interim targets are appropriate?**

17 **A.** In general, we support PSE's interim and specific targets for renewable energy and
18 energy efficiency, and its proposed DER sub-target. These targets are aggressive but
19 reasonable. As I discuss below, we believe that PSE's demand response target should be
20 increased, and that a greater portion of PSE's DER sub-target should be reserved for
21 community solar.

22 **Q. Do you believe that the modeling PSE conducted to support its proposed interim**
23 **targets was reasonable?**

1 A. No. While we generally support PSE's interim targets, we do have concerns with the
2 analytical approach used to establish the targets, as described in the testimony of Elaine
3 Hart (Exh. EKH-1T).

4 PSE relies on portfolio optimization modeling to calculate its interim clean energy
5 targets and projected incremental cost of compliance, as described in Ms. Hart's
6 testimony. In order for PSE to accurately calculate its interim clean energy targets and
7 projected incremental cost, PSE's models must reflect the full value of clean energy
8 resources. PSE's modeling – starting with their 2021 Integrated Resource Plan, and
9 continuing into the CEIP – improperly applies the Social Cost of Greenhouse Gases,
10 which has the effect of undervaluing renewable and non-emitting resources. PSE's
11 modeling also undervalues the capacity contribution of energy storage, which has the
12 effect of undervaluing that resource. As Ms. Hart explains, PSE should rerun its model
13 with new assumptions that fully account for the Social Cost of Greenhouse Gas
14 Emissions and the true capacity value of energy storage to ensure PSE's portfolios reflect
15 the full value of clean resources.

16 Based on these new model runs, PSE should recalculate both its interim clean
17 energy target (and storage sub-target), and its projected incremental cost of compliance.
18 If these new model runs and associated calculations result in changes to targets or
19 projected incremental cost, PSE should incorporate these changes in its CEIP biennial
20 update.

21 **Q. How should the Inflation Reduction Act (IRA) impact PSE's modeling?**

22 A. Since PSE's CEIP analysis was conducted, President Biden has signed the Inflation
23 Reduction Act (IRA), which further reduces the cost of renewable energy, energy

1 storage, and demand-side resources like energy-efficient appliances. The Inflation
2 Reduction Act provides grants, loans, and tax incentives that will drive hundreds of
3 billions of dollars in cumulative investment in clean energy infrastructure between now
4 and 2030. While we acknowledge that there may not be sufficient information available
5 about the impact of these incentives on PSE's proposed targets today, it is reasonable to
6 assume that the incentives provided through this legislation will support more aggressive
7 targets. PSE should incorporate the cost impacts of the IRA into its Integrated Resource
8 Plan modeling going forward.

9 **Q. Do you recommend that PSE update its analysis to incorporate the effects of the**
10 **IRA in this CEIP?**

11 **A.** No. Given that we are already nearly a year into the four-year implementation period for
12 this CEIP (as of the filing date of this testimony), we recommend that PSE move ahead
13 with the targets for renewable energy, energy efficiency, and its DER sub-target in this
14 CEIP (with the modifications I recommend below to demand response and community
15 solar). Instead, PSE should update its analysis for the biennial update.

16 **Incremental Cost**

17 **Q. How must PSE calculate the projected incremental cost of complying with CETA?**

18 **A.** PSE's CEIP must include a projected incremental cost of compliance with CETA. WAC
19 480-100-660. This projected incremental cost calculation is meant to capture the cost of
20 the actions that the utility would not have taken but for the requirement to comply with
21 the clean energy standards and associated equity requirements in RCW 19.405.040 and
22 RCW 19.405.050. *Id.*

1 To calculate the incremental cost of the actions PSE takes to comply with CETA,
2 PSE must compare its lowest reasonable cost portfolio to the alternative lowest
3 reasonable cost and reasonably available portfolio. “Alternative lowest reasonable cost
4 and reasonably available portfolio” is defined as “the portfolio of investments the utility
5 would have made and the expenses the utility would have incurred if not for the
6 requirement to comply with RCW 19.405.040 and 19.405.050.” When developing its
7 projected incremental cost, PSE must demonstrate that the investments and expenses it
8 accounts for are *directly attributable* to actions necessary to comply with, or make
9 progress towards, the requirements of RCW19.405.040 and RCW 19.405.050. *See* WAC
10 480-100-660.

11 **Q. Why is the incremental cost of CETA implementation an important consideration?**

12 **A.** Incremental cost is important because CETA creates a compliance pathway that is based
13 on a utility’s actual incremental cost of meeting CETA’s clean energy standards:

14 “An investor-owned utility must be considered to be in compliance with the
15 standards under RCW 19.405.040(1) and 19.405.050(1) if, over the four-year
16 compliance period, the average annual incremental cost of meeting the standards
17 or the interim targets established under subsection (1) of this section equals a two
18 percent increase of the investor-owned utility's weather-adjusted sales revenue to
19 customers for electric operations above the previous year, as reported by the
20 investor-owned utility in its most recent commission basis report. All costs
21 included in the determination of cost impact must be directly attributable to
22 actions necessary to comply with the requirements of RCW 19.405.040 and
23 19.405.050.”

1 RCW 19.405.060(3). In other words, a utility may comply with CETA even without
2 meeting the statutory clean energy standards if the utility qualifies for and elects to use
3 this cost compliance pathway. Because this cost compliance pathway is meant to be a
4 narrow exception to the rule that utilities must meet CETA's clean energy standards, it is
5 critical that the incremental cost calculation be accurate and not include any costs the
6 utility would have incurred absent the obligation to comply with CETA's clean energy
7 standards.

8 **Q. Should the Commission determine in this proceeding whether PSE qualifies for the**
9 **incremental cost compliance pathway for this CEIP?**

10 **A.** No. Importantly, it is neither necessary nor appropriate for the Commission to determine
11 in this proceeding whether PSE has complied or has demonstrated that it may comply
12 using this pathway. This pathway is only available once actual incremental costs are
13 known, after the first compliance period. WAC 480-100-660(6). However, the
14 Commission must review PSE's projected incremental cost calculation in this
15 proceeding, and should offer guidance to PSE and the parties on which actions may
16 appropriately be included in the calculation of projected incremental cost.

17 **Q. Does the CEIP provide a reasonable estimate of PSE's projected incremental cost of**
18 **CETA implementation?**

19 **A.** No. PSE's projected incremental cost calculation does not accurately reflect its
20 incremental cost of CETA implementation because many of the investments it includes in
21 the calculation are not directly attributable to actions necessary to comply with, or make
22 progress towards, the requirements of RCW 19.405.040 and RCW 19.405.050.

23 **Q. Which costs do you believe that PSE incorrectly attributed to CETA?**

1 A. PSE has erroneously attributed a significant portion of its grid modernization and
2 “emergent electric” expenditures (74 percent of the overall costs of those programs) to
3 CETA. While many of these investments have the benefit of enabling customer-sited
4 generation, two-way communication flow, and distributed storage, NWEC witness Josh
5 Keeling explained in his testimony in Docket UE-220066/UG-220067/UG-210918 that
6 the bulk of these expenditures are general investment priorities, and PSE has not
7 demonstrated that they are driven by CETA.¹⁰ As Mr. Keeling explains, these are
8 investments that PSE has decided make sense for the business and its customers, which
9 also happen to support concepts identified in their CEIP. Mr. Keeling further raises
10 concerns about PSE’s conclusion that any investment that relates to a CEIP requirement
11 is in fact caused by CETA, given that CETA covers a broad swathe of the utility’s
12 business. It would not be surprising to see a utility like PSE undertake many if not all of
13 these investments (in some form or another) over the coming years, absent CETA.

14 **Q. Is NWEC challenging the reasonableness of these investments?**

15 A. The reasonableness of these investments for cost recovery purposes is not an issue in this
16 proceeding. However, as explained in Mr. Keeling’s testimony in Docket UE-
17 220066/UG-220067/UG-210918, NWEC believes the preliminary cost estimates for grid
18 modernization investments appear reasonable. But, importantly, PSE has not justified the
19 need for such a large overall capital expense for grid modernization and DER enablement
20 in light of its lack of a robust distribution system planning effort, its lackluster demand
21 response target, and the absence of a longer-term programmatic strategy for supporting

¹⁰ Exh. LCM-5.

1 DR and DERs. In particular, Mr. Keeling recommends that the capital expenditures for
2 “Circuit Enablement – DER and Microgrids” not be approved for inclusion in rates until
3 systematic and transparent distribution system planning can take place, in order to assess
4 the prudence of these investments. In its CEIP, PSE has allocated nearly all
5 software/hardware and grid modernization costs to CETA’s incremental cost calculation.
6 In total, this amounts to \$55,150,180 in incremental costs, per Tab 7 (“Incremental
7 Costs”) of Appendix E-2: Incremental Cost Calculations. We believe that nearly all of the
8 actions listed are investments that a modern utility operating in the 21st century could
9 reasonably make to provide their customers efficient and adequate service, and so the
10 costs of these actions are not necessarily directly attributable to CETA. Many of the
11 proposed actions will, in fact, create a more efficient, less expensive system for PSE to
12 operate. Therefore, these costs should also be included in a No-CETA base case for the
13 purpose of calculating the incremental cost of CETA.

14 **Q. What do you recommend, as it relates to PSE’s projected incremental cost**
15 **calculation?**

16 **A.** After making the corrections to the modeling as recommended by Ms. Hart for both the
17 CETA portfolio and the no-CETA portfolio, and removing the grid modernization and
18 DER enablement expenditures as recommended by Mr. Keeling, I recommend that PSE
19 recalculate its projected incremental cost for the sole purpose of demonstrating
20 compliance with WAC 480-100-660.

21 **Specific Actions**

22 **Q. Please explain the requirement that a CEIP include “specific actions.”**

1 A. Each CEIP must include the specific actions the utility will take over the implementation
2 period that will allow the utility to meet CETA’s clean energy standards and the utility’s
3 interim targets. WAC 480-110-640(5)-(6). CEIPs must include certain data about each
4 specific action in tabular format – such as general location and cost, metrics relating to
5 resource adequacy, and an assessment of customer benefits including impacts to named
6 communities. WAC 480-110-640(5). CEIPs must also include a narrative description of
7 specific actions, explaining how the selected specific actions demonstrate progress
8 toward CETA’s clean energy standards identified in WAC 480-100-610(2) and the
9 utility’s interim targets, and how the selected specific actions will impact the distribution
10 of customer benefits and burdens to all customers and specifically to named
11 communities, among other requirements. WAC 480-110-640(6).

12 **Q. Does PSE’s CEIP meet the requirements related to specific actions? Explain.**

13 A. No. As described in the testimony of Kara Durbin (Exh. KKD-1T), the “specific actions”
14 that PSE has proposed include execution of its All-Source and DER RFPs and acquisition
15 of energy efficiency measures detailed in its Biennial Conservation Plan. PSE’s approach
16 is problematic because it is not possible for PSE to describe the impact of its actions on
17 the clean energy transformation standards or on customer benefits including to named
18 communities with any specificity until PSE has selected actual, concrete, specific
19 resource actions from the results of its RFPs.

20 PSE provides the greatest level of specificity in describing the actions that support
21 its DER sub-target. Even there, however, PSE describes these actions as a “potential suite
22 of DER resources” which are “meant to be illustrative of the types of DER resources PSE

1 may pursue during the four-year period.” Ms. Durbin provided the caveat, however, that
2 “actual DER development... will depend upon RFP results.” (Exh. KKD-1T at 17.)

3 In Chapter 8 of the CEIP and in Ms. Durbin’s testimony, PSE commits to
4 including the results of the All-source and Targeted DER RFP in the 2023 Biennial CEIP
5 Update. In this update, PSE will use the results of the RFPs to better describe the specific
6 actions PSE will take, including projects PSE has acquired and programs PSE is
7 developing. While I appreciate that PSE is willing to eventually identify the specific
8 actions it will take, PSE is required to include these specific actions in the CEIP itself, not
9 in an update two years after the final CEIP. PSE’s approach eliminates the opportunity
10 for meaningful public input on PSE’s actual specific actions, because the CEIP is
11 finalized long before PSE selects those actions.

12 **Q. In your opinion, what are the shortcomings with PSE’s approach to specific actions**
13 **in this CEIP?**

14 **A.** There are several problems with the approach that PSE took to identify specific actions in
15 this CEIP. First, as I discussed above, PSE’s process for developing this CEIP means
16 specific actions will not be included until the biennial update, which is two years too late
17 and forecloses critical opportunities for public input.

18 Second, even for PSE’s proposed generic programs that may ultimately inform its
19 choice of specific actions, I have observed that PSE habitually and indiscriminately
20 disregards feedback from advisory group members and the public during the planning
21 process. PSE typically collects feedback through feedback forms, and responds in writing
22 several weeks later. PSE’s feedback forms are attached as part of the Advisory Group
23 Meeting Materials (appendix C-3 to the CEIP). The lack of actual dialogue in this

1 approach limits opportunities for stakeholder buy-in, and makes collaboration all but
2 impossible.

3 Third, PSE's process for selecting specific actions is neither transparent nor even
4 accessible through discovery to intervenors who have signed the protective order in this
5 docket. In an attempt learn more about what the specific actions in this CEIP could be,
6 NWEC and Front and Centered submitted multiple data requests to the Company. PSE
7 responded by objecting to our data requests. (*See* Exh. LCM-6.) It is therefore impossible
8 for intervenors to know what specific actions PSE is even considering. If we don't know
9 what specific actions PSE is considering, then even parties to a formal adjudication can't
10 know how those actions will impact named communities. Communities and stakeholders
11 that are not parties to a formal adjudication have even less access to information on the
12 specific actions PSE is considering, and so are unable to provide meaningful input that
13 can actually influence outcomes. PSE's practices of withholding relevant information
14 from stakeholders and limiting the impact of public participation in its own decision-
15 making processes ultimately undermine the planning process, calling the relevance of its
16 CEIP into question. The Commission should reject this flawed approach, and provide
17 guidance to ensure transparency and accountability going forward.

18 **Q. What could a better approach to identifying specific actions look like?**

19 **A.** The CEIP should commit to the specific actions that appear to best accomplish CETA's
20 goals based on the data that is available to PSE during the stakeholder engagement and
21 CEIP drafting process. If the RFP results indicate that the approved specific actions are
22 not feasible, or not optimal, then the CEIP can be revised during the biennial update
23 based on the new information obtained through the RFP. Information supporting the

1 revision can and should be made publicly available for stakeholder and public review.

2 This is foundational to building trust in the process, and obtaining stakeholder and

3 customer buy-in for the CEIP's outcomes.

4 **Q. How can PSE remedy its failure to include specific actions in this CEIP?**

5 **A.** In future CEIPs, PSE should develop specific actions in collaboration with the
6 communities it serves, as part of the development of the initial CEIP. Since the
7 opportunity for that advance collaboration has passed for this CEIP, PSE should offer an
8 opportunity for public comment on the specific actions it includes in its biennial update.
9 Additionally, PSE should adopt the modifications I propose to PSE's specific actions in
10 the next section of my testimony.

11 **Customer-side Resources**

12 **Q. Please describe CETA's resource prioritization.**

13 **A.** CETA establishes resource prioritization that utilities must follow in planning and
14 procurement decisions. First, utilities are required to pursue all cost-effective, reliable and
15 feasible conservation and efficiency resources and demand response. Second, if new
16 investments are necessary, utilities must consider acquiring existing renewable resources,
17 and then new renewable resources and energy storage, before considering other
18 resources. RCW 19.405.040(6)(a)(ii) and (iii).

19 **Q. Please describe CETA's requirements for demand response.**

20 **A.** "Demand response" means changes in electric usage by demand-side resources from their
21 normal consumption patterns in response to changes in the price of electricity, or to
22 incentive payments designed to induce lower electricity use, at times of high wholesale
23 market prices or when system reliability is jeopardized. "Demand response" may include

1 measures to increase or decrease electricity production on the customer's side of the
2 meter in response to incentive payments. (RCW 19.405.020(11)). CETA requires
3 utilities, in their CEIPs, to propose a target for demand response. RCW
4 19.405.060(1)(a)(i).

5 **Q. Has PSE developed a demand response target?**

6 **A.** Yes.

7 **Q. Describe the process that PSE engaged in to develop its demand response target.**

8 **A.** PSE witness Ms. Durbin describes the process that PSE undertook to develop its DR
9 target of 23.7 MW for this CEIP:

10 “PSE commissioned a conservation potential assessment that included an analysis
11 of DR opportunities. Because PSE is a winter peaking utility, PSE focused on DR
12 programs that could reduce PSE’s winter peak demand. This was a bottom-up
13 analysis that looked at factors such as number of customers, equipment saturation
14 rates, expected load impact, market conditions, and customer adoption estimates.
15 Using the information from the conservation potential assessment, PSE estimated
16 the cost-effectiveness of the effective DR programs.

17 This DR target represents what PSE hopes to achieve over this CEIP period. As
18 noted above, however, depending on the results of its DER RFP, PSE may update
19 its DR target based on market availability.” (KKD-1T at 21-22.)

20 **Q. Is PSE’s demand response target reasonable?**

21 **A.** No. As discussed in Mr. Keeling’s testimony in Docket UE-220066/UG-220067/UG-
22 210918, attached as Exh. LCM-5, PSE’s DR target is based on overly conservative
23 assumptions for effective load carrying capacity (ELCC) for demand response, which are

1 not aligned with other utilities in the region. Mr. Keeling also notes that PSE did not
2 consider large commercial or industrial (C&I) demand response applications, which are
3 common programs for other utilities in the region, including Tacoma Power, PacifiCorp,
4 and Portland General Electric. According to Mr. Keeling, “the combined effect of these
5 conservative assumptions by PSE is that the utility places an unrealistically high value on
6 central station thermal generators over the demand-side resources. The result is an
7 artificially low target for demand response, which leaves significant system benefits on
8 the table.” (See Exh. LCM-4 at 17–21.)

9 Further, PSE’s DR target does not include summer demand response, which PSE
10 did not evaluate in its demand response potential assessment, nor does it include the
11 demand response capacity which PSE recently agreed to pursue as part of a proposed
12 Partial Multiparty Settlement Stipulation in Docket UE-220066/UG-220067/UG-210918.
13 PSE agreed to acquire 40 MW of DR during the two-year rate plan (2023-2024). PSE’s
14 own DR RFP shows 160 MW of Tier 1 demand response available today, even with the
15 conservative economics put forward by the utility.

16 Finally, PSE’s analysis of its planned DR specific actions, including residential
17 Direct Load Control, likely overstates costs and understates benefits due to a variety of
18 errors in PSE’s analysis, discussed in detail in the testimony of Scott Reeves (Exh. SR-
19 1T) in this docket.

20 **Q. Has PSE met its obligation to “pursue all cost-effective demand response,” as**
21 **required by RCW 19.405.040(6)(a)(ii)?**

22 **A.** No. PSE has not demonstrated that it has met this obligation. PSE’s 2021 Integrated
23 Resource Plan, and therefore its current CEIP, both undervalue the capacity contribution

1 of DR as described by Mr. Keeling, and discount PSE's summer peaking needs as
2 described by Ms. Hart. Further, PSE only considered winter DR in its conservation and
3 demand response potential assessment. These assumptions are sufficiently unreasonable,
4 outdated, and out of alignment with the realities driving the need for demand response in
5 the region that the Commission should reject PSE's proposed DR target, and require PSE
6 to develop a new DR target equal to the amount of cost-effective DR bids received in its
7 DR RFP.

8 **Q. What should PSE's DR target be in this CEIP and how should it be developed?**

9 **A.** The target for this CEIP should be equal to all cost-effective summer and winter DR
10 received in response to the RFP process. This number is unknown to us due to PSE's
11 failure to respond to our data requests. However, it is known to PSE. And, we know that
12 it may be up to 160 MW, as identified in the RFP summary report. In order to update its
13 DR target, we recommend that PSE do the following:

14 (1) update the ELCC values for demand response to reflect DR contribution to
15 summer and winter peak;

16 (2) update its generic cost assumptions to reflect the costs of bids received in the
17 DER/DR RFP process, particularly the cost of Residential Smart Thermostat
18 Direct Load Control;

19 (3) include DR as an available resource in the portfolio model in its IRP for both
20 summer and winter peak, and reoptimize its portfolio to establish the CEIP DR
21 target.

22 **Q. Why not propose a more specific DR target?**

1 A. PSE did not provide the information necessary for intervenors to assess the cost-
2 effectiveness of the bids received on its DR RFP. PSE objected to our request for that
3 information.

4 **Q. How can this situation be remedied in the future?**

5 A. In the future, PSE could avoid having to rerun its models after its Final CEIP has been
6 submitted by incorporating stakeholder feedback on important issues like the capacity
7 contribution and summer peaking value of DR during the planning process. NWECC
8 raised these issues during the planning process, in comments on the IRP in February and
9 May 2021, and draft CEIP in December 2021.

10 **Q. Describe CETA's requirements for energy efficiency.**

11 A. CETA requires that utilities "pursue all cost-effective energy efficiency," and propose an
12 energy efficiency target in the CEIP. RCW 19.405.040(6)(a); RCW 19.405.060(1)(a)(i).

13 **Q. Has PSE developed an energy efficiency target?**

14 A. Yes.

15 **Q. Describe the process that PSE undertook to develop an energy efficiency target for
16 this CEIP.**

17 A. PSE developed its EE target through the Biennial Conservation Planning ("BCP")
18 process. When the Social Cost of Greenhouse Gases was incorporated into the model,
19 PSE's EE portfolio target increased by fifty-eight percent across the board for each
20 measure.

21 **Q. Is PSE's EE target reasonable?**

22 A. Yes. We support PSE's EE target, as proposed in its BCP and CEIP. However, we do not
23 believe that PSE has planned to deliver its EE portfolio in its CEIP to achieve equitable

1 outcomes. As discussed in the testimony of Roger Colton (Exh. RDC-1T), we
2 recommend that PSE target its programs to the customers with greatest need. This will
3 require increasing funding for PSE's EE programs to ensure that low-income and named
4 community customers have access to savings that do not require a prohibitively high
5 level of customer investment.

6 **Q. Has PSE developed other targets that you want to address?**

7 **A.** Yes. PSE has developed a DER sub-target, which is not required by CETA, but
8 contributes to meeting CETA's equity mandate. PSE's sub-targets include 80 MW of
9 new distributed energy resources and 25 MW of distributed storage. CEIP at Ch.2 p.26.
10 Within the 80 MW of new distributed energy resources, PSE predicted that its preferred
11 portfolio would include 25.6 MW of community solar (divided between community
12 solar, income-eligible community solar, and multi-family community solar programs).
13 CEIP at Ch.2 p.41-42. While we generally support PSE's DER sub-target, we believe a
14 greater portion of that sub-target should be allocated to community solar programs.

15 **Q. What increase are you recommending to PSE's community solar programs?**

16 **Explain.**

17 **A.** Community solar programs offer one of the best opportunities to ensure the equitable
18 distribution of benefits from PSE's DER programs. As discussed in greater detail in the
19 testimony of Scott Reeves (Exh. SR-1T), community solar programs, if well designed,
20 can be accessible to any PSE customer, unlike some rooftop solar programs that are only
21 accessible to homeowners. Community solar subscriptions that have reduced fees and
22 subscription costs based on income or other qualifications can make clean energy
23 affordable and significantly reduce energy burden. While I appreciate PSE's decision to

1 increase its planned community solar program from the draft to the final CEIP based on
2 stakeholder and advisory group input, I believe PSE should increase its community solar
3 program to 50 MW in 2025, representing 25 MW annually in 2024 and 2025.

4 **Q. Why do you believe this significant increase in PSE's community solar programs is**
5 **appropriate?**

6 **A.** PSE has proposed a total of 80 MW of distributed solar programs, spread across seven
7 programs. Of the total 80 MW for distributed solar programs taken together, only 9.88
8 MW appeared to be explicitly allocated for income-eligible customers, highly impacted
9 communities, or multifamily customers. In other words, only slightly more than 12% of
10 the energy benefits of PSE's distributed solar programs are specifically designated, and
11 vulnerable populations are not explicitly included in the designation. In contrast, PSE
12 reports that 27% of PSE's customers are in highly impacted communities and 37% are in
13 highly vulnerable populations. (CEIP, Figures 3-6 and 3-7, p.63.) This means that named
14 communities may receive a significantly smaller share of the energy benefits of PSE's
15 distributed solar programs than their share of PSE's customer base, without increased
16 targets and intentional planning. Significantly increasing the community solar target to 50
17 MW and targeting that increase to named communities and low-income customers will
18 help to ensure that the energy and nonenergy benefits of PSE's actions are equitably
19 distributed.

20 **Q. Are you recommending other changes to PSE's proposed solar programs?**

21 **A.** Yes. I recommend that PSE not pursue its proposed solar rooftop leasing program. The
22 solar rooftop leasing program does not direct the energy benefits of the solar installation
23 to the participants, does not increase community self-governance, and does not allow

1 named community participants to benefit from the increased property values or wealth
2 accumulation that an ownership-based pathway could provide.

3 More broadly, I also recommend that PSE ensure all its solar programs are
4 targeting and benefitting named communities through changes to program design and
5 minimum designations, as described in the testimony of Scott Reeves (Exh. SR-1T).

6 **Q. What do you mean by “minimum designations”?**

7 **A.** By “minimum designations,” I mean a specific amount of the energy or capacity of a
8 given program or tranche of programs that is earmarked for delivery to a subset of
9 customers, such as named communities or low-income customers.

10 **Q. How do you believe PSE should use minimum designations?**

11 **A.** As described in more detail in the testimony of Roger Colton and Scott Reeves, I believe
12 PSE should develop minimum designations for each of its DER offerings (or at a
13 minimum, across a tranche of offerings such as across all solar programs). Minimum
14 designations are one of the simplest and clearest ways to ensure that the energy benefits
15 of PSE’s DER programs are equitably distributed.

16 **Q. Why do you believe minimum designations are necessary?**

17 **A.** As described in the testimony of Roger Colton, absent minimum designations, there are
18 significant market barriers to low-income and named community participation in EE and
19 other DER programs. Absent minimum designations, and deliberate strategies and
20 changes to program design to ensure these minimum designations are met, it is likely that
21 low-income and named community customers will be underrepresented in PSE’s DER
22 programs and will not receive an equitable share of the benefits.

23 **Q. Which programs should be subject to minimum designations?**

1 A. All of PSE's DER offerings, either by individual program or at a minimum across
2 tranches of offerings (e.g., all solar programs), should have minimum designations for
3 named communities.

4 **Q. What level of minimum designation is appropriate?**

5 A. I believe PSE should work with its advisory groups and stakeholders to develop more
6 specific minimum designations for its next CEIP. As a baseline, the level of minimum
7 designation should presumptively mirror the percentage of named communities in PSE's
8 customer base. PSE reports that 27% of PSE's customers are in highly impacted
9 communities and 37% are in highly vulnerable populations. (CEIP, Figures 3-6 and 3-7,
10 p.63.) For this initial CEIP, we recommend that PSE commit to achieving a minimum of
11 30% of energy benefit targets flowing to named communities by 2025 for each of its
12 DER solar, DER storage, DR, and EE programs.

13 **Q. Should minimum designations apply to all named communities and low-income**
14 **customers as an undifferentiated group?**

15 A. Eventually, no. PSE should work to identify the subset of named community and low-
16 income customers with deepest need, as discussed in the testimony of Roger Colton. PSE
17 should develop sub-designations for these specific customers. Just as PSE must ensure
18 that the benefits of its actions are equitably distributed between named communities and
19 all customers, so too must PSE ensure that benefits are equitable within named
20 community customers. Some groups of named community customers are likely to be
21 much more difficult to reach than others, and PSE must work to identify those customers
22 and find a way for them to access benefits from each of PSE's DER programs (or tranche
23 of programs).

1 Moreover, PSE should collaborate with the named communities it serves to tailor
2 the DER and other offerings in each individual community to meet each community's
3 needs. To the greatest extent possible, PSE should work to propose specific actions that
4 alleviate the specific factors that led to a community's designation as highly impacted or
5 vulnerable.

6 **Q. Are you recommending any changes to PSE's proposed distributed storage**
7 **programs?**

8 **A.** Yes. As discussed in the testimony of Scott Reeves, I recommend that PSE adopt
9 program design, targeting, and minimum designations to ensure named communities and
10 low-income customers equitably benefit from PSE's distributed storage programs. PSE
11 has proposed 16.3 MW of distributed storage between two programs, with only 0.3 MW
12 of one program (battery leasing) designated for income-eligible customers—meaning that
13 less than 2% of the energy benefits of PSE's distributed storage programs are specially
14 designated. PSE should develop targeted program designs and minimum designations to
15 ensure a much greater percentage of the energy and nonenergy benefits of its storage
16 programs flow to named communities and low-income customers.

17 **Q. Should PSE intentionally pursue opportunities to co-deploy DER resources?**

18 **A.** Yes, I recommend that PSE intentionally pursue co-deployment of all its DER programs
19 to increase savings and reduce costs, as discussed in the testimony of Scott Reeves.

20 **CONCLUSION**

21 **Q. Please summarize your recommendations.**

22 **A.** We recommend the following conditions:

- 1 1. PSE commits to achieving a minimum of 30% of energy benefit targets
2 flowing to named communities by 2025 for each of its DER solar, DER
3 storage, DR, and EE programs. PSE also commits to develop a geotargeting
4 approach to identify the customers and communities with deepest need within
5 the broader category of named communities, in consultation with stakeholders
6 and advisory groups. By the 2023 Biennial CEIP Update, PSE will designate a
7 minimum percentage of energy benefits that will flow to named communities
8 with deepest need.
- 9 2. PSE commits to developing and implementing a DER Public Engagement
10 Pilot to gain experience with and understanding of engaging named
11 community members at the “Empowerment” level in developing DER
12 offerings specifically for named communities. PSE will collaborate with the
13 EAG, other relevant advisory groups, and stakeholders to develop this pilot.
14 PSE will begin work on the design of the pilot within three months of a signed
15 settlement agreement, and will implement the pilot after the 2023 Biennial
16 CEIP Update.
- 17 3. PSE will increase its community solar target from 25.4 MW to 50 MW, and
18 will remove the residential rooftop solar leasing from consideration in its list
19 of DER programs.
- 20 4. PSE will update its energy efficiency target no later than the 2023 Biennial
21 Update, and in its Biennial Conservation Plan based on continued discussion
22 with the Conservation Resource Advisory Group (CRAG) and EAG.

1 Discussion will include program design elements which could promote more
2 participation in EE in named communities.

3 5. PSE will conduct an equity analysis for the All-Source RFP proposals so that
4 it can be fairly compared to the DER RFP proposals. PSE will solicit more
5 information from bidders and/or independently develop additional information
6 as necessary to effectively evaluate the equity components of the All-Source
7 and DER RFP proposals.

8 6. In the 2025 CEIP, PSE will describe how specific program selection and
9 implementation actions will mitigate risks and reduce burdens to named
10 communities. PSE will incorporate qualitative data on the lived experience of
11 named communities in this distributional equity analysis.

12 7. PSE will increase its demand response target to include all cost-effective DR
13 bids it received in response to its recent RFP, using the methodology
14 described in my testimony.

15 8. PSE will include the following additional CBIs and metrics in this CEIP:

- 16 • In the category of energy benefits, a new CBI “Increased Named
17 Community Clean Energy,” and new metrics, “increase percentage of
18 utility spending on DR, DER, and renewable energy programs that
19 benefits highly impacted communities or vulnerable populations”;
20 “increase average energy savings per home for customers in highly
21 impacted communities and vulnerable populations taking part in each of
22 PSE’s DER programs”; “Increased number and percentage of appliances
23 converted to efficient models in named communities”; “Improvement and

1 expansion of energy efficiency in rental housing stock in named
2 communities”; “Increase total MWh of distributed energy resources 5 MW
3 and under, where benefits and control of the resource accrue to members
4 of named communities”; “Increase total MWs of energy storage resources
5 5 MW and under, where benefits and control of the resource accrue to
6 members of named communities”; “Increase number (i.e., sites, projects,
7 and/or households) of distributed renewable generation resources and
8 energy storage resources, where benefits and control of the resource
9 accrue to members of named communities”; and “Increase total MWh of
10 energy savings from EE programs, where benefits and control of the
11 savings accrue to members of named communities.” Where known, for
12 each of the preceding four metrics, PSE will specify whether the named
13 community resources are in highly impacted communities and/or
14 vulnerable populations and/or known low-income customers. For
15 vulnerable populations, where known, PSE will specify named community
16 resources broken down by the sensitivity factors and/or socioeconomic
17 factors that led the customer or community to be designated highly
18 vulnerable.

- 19 • In the category of public health, an additional CBI, “Improved indoor air
20 quality,” and additional metrics, “Reduced annual SO₂ emissions in
21 named communities from utility-owned electric generation resources, by
22 census tract”; “Reduced annual NO_x emissions in named communities
23 from utility-owned electric generation resources, by census tract”;

1 “Reduced annual PM2.5 emissions in named communities from utility-
2 owned electric generation resources, by census tract”; “Improved housing
3 quality”; and “Decreased health impacts from extreme heat.”

- 4 • In the categories of “reduction in cost” and “energy security,” two new
5 CBIs, “Reduced residential Arrearages and Disconnections for
6 Nonpayment,” and “Reduced number of Households with a High Energy
7 Burden (>6%),” as well as additional metrics, Decreased number and
8 percentage of residential electric disconnections for nonpayment by
9 month, measured by location and demographic information (zip
10 code/census tract, KLI customers, Vulnerable Populations, Highly
11 Impacted Communities, and for all customers in total); Decreased
12 residential arrearages as reported pursuant to Commission Order 04 in
13 Docket U-200281; Decreased number and percent of households with a
14 high energy burden (>6%); and Decreased average excess burden per
15 household.

16 9. PSE will adopt a set of readability guidelines for its next CEIP.

17 10. PSE will rerun its portfolio optimization models with updated methodology
18 for incorporating the Social Cost of Greenhouse Gas Emissions and updated
19 capacity values for energy storage. PSE will recalculate its interim clean
20 energy targets and energy storage sub-target, and its projected incremental
21 cost of compliance with CETA, based on these new model runs. PSE will
22 incorporate any changes in its Biennial Update.

1 11. PSE will remove the grid modernization and “emergent electric” expenditures
2 described in Mr. Keeling’s testimony from its projected incremental cost of
3 compliance with CETA.

4 12. PSE commits to develop deeper partnerships with the named communities it
5 serves, and commits to implementing the priorities and actions identified by
6 communities. PSE also commits to develop tools, such as an energy justice
7 scorecard, that allow communities to hold PSE accountable to its goals.

8 **Q. Does this conclude your testimony?**

9 **A. Yes, it does.**