EQUITY
CHAPTER THREE

Contents

1. Introduction

In this Chapter, Puget Sound Energy (PSE) illustrates its research on energy justice, describes alignment on a definition of energy justice, and lays out a framework by which we understand and model equity for the clean energy transition. This includes updates to existing equity elements like vulnerable populations and CBIs, as well as establishing new elements like deepest need and minimum designations.

2. Definitions of energy equity

To gain a better understanding of PSE's approach to an equitable energy future, PSE highlights some of the definitions of energy equity based on existing literature:

- **The Energy Equity Project (EEP, University of Michigan):** "Energy equity recognizes the historical and cumulative burdens of the energy system borne by frontline and low-income communities and Black, Brown, and Native people. To eliminate these disparities, energy equity centers the voices of frontline communities in energy planning and decision-making and ensures the fair distribution of clean energy benefits and ownership."[1]
- **Pacific Northwest National Laboratories (PNNL):** "Energy equity recognizes that disadvantaged communities have been historically marginalized and overburdened by pollution, underinvestment in clean energy infrastructure, and lack of access to energy-efficient housing and transportation. An equitable energy system is one where the economic, health, and social benefits of participation extend to all levels of society, regardless of ability, race, or socioeconomic status. "Achieving energy equity requires intentionally designing systems, technology, procedures, and policies that lead to the fair and just distribution of benefits in the energy system."[2]
- **The American Council for an Energy-Efficient Economy (ACEEE):** "At ACEEE, we define energy equity using a sustainability framework developed by Angela Park and colleagues at the Urban Sustainability Directors Network. [T]his framework includes four dimensions of equity: procedural equity, structural equity, distributional equity, and transgenerational equity. We use this framework to assess the extent to which policies and programs embed inclusive engagement processes, result in a fair distribution of benefits and burdens, and ensure desired outcomes benefit future generations."[3]
- **Lawrence Berkeley National Laboratory (LBNL):** "Energy equity is the fair distribution of the benefits and burdens of energy production and consumption. States are increasingly

1. University of Michigan School for Environment and Sustainability, Energy Equity Project Framework Report, v1.0 (2022), available at https://energyequityproject.com/wp-content/uploads/2022/08/220174_EEP_Report_8302022.pdf
2. Pacific Northwest National Laboratory, Energy Equity: What is Energy Equity?, available at https://www.pnnl.gov/projects/energy-equity
3. American Council for an Energy-Efficient Economy, Energy Equity, available at https://www.aceee.org/topic/energy-equity

> recognizing equity as a goal of utility regulation, going beyond the traditionally stated objectives to ensure that electricity systems are reliable, safe, and fairly priced."[4]

As evidenced from these definitions, energy equity is a dynamic and multi-faceted issue that considers the full spectrum of equity. For instance, the definitions proposed by ACEEE and Berkeley Lab highlight the distributional aspect of equity, by advocating that all communities, especially those that are disadvantaged/marginalized, have access to clean energy that is affordable, safe, and sustainable. However, the definitions proposed by EEP and PNNL incorporate all equity dimensions. They emphasize the need to recognize and respond to the historic and ongoing inequities that have plagued marginalized communities and seek to ensure that they are at the frontline of the energy planning and decision-making process.

In general, all four definitions overlap in their meaning and capture the definition and dimensions or tenets of energy justice described by the Washington Utilities and Transportation Commission (the Commission) in its order in Docket UG-210755,[5] the 2021 general rate case proceeding for Cascade Natural Gas Company:

Energy justice is focused on: (1) ensuring that individuals have access to energy that is affordable, safe, sustainable, and affords them the ability to sustain a decent lifestyle; and (2) providing an opportunity to participate in and have meaningful impact on decision-making processes.

The core tenets of energy justice are:

- Distributional justice, which refers to the distribution of benefits and burdens across populations. This objective aims to ensure that marginalized and vulnerable populations do not receive an inordinate share of the burdens or are denied access to benefits.
- Procedural justice, which focuses on inclusive decision-making processes and seeks to ensure that proceedings are fair, equitable, and inclusive for participants, recognizing that marginalized and vulnerable populations have been excluded from decision-making processes historically.
- Recognition justice, which requires an understanding of historic and ongoing inequalities and prescribes efforts that seek to reconcile these inequalities.
- Restorative justice, which is using regulatory government organizations or other interventions to disrupt and address distributional, recognitional, or procedural injustices, and to correct them through laws, rules, policies, orders, and practices.[6]

4. Ernest Orlando Lawrence Berkeley National Laboratory, Advancing Equity in Utility Regulation, at 8 (Dec. 16, 2021), available at https://eta-publications.lbl.gov/sites/default/files/advancing_equity_webinar_slides_20211216.pdf
5 WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022)
6. WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022) at ¶ 56

3. PSE's energy equity approach

PSE identifies and acknowledges energy equity in its clean energy operations and adopts the definition of energy equity proposed by the University of Michigan, School for Environment and Sustainability's Energy Equity Project.[7]

PSE has adopted the definition of energy equity proposed by the Energy Equity Project because it builds upon the four core tenets or dimensions of justice as delineated in the Commission order in Docket UG-210755 — recognition, procedural, distributional, and restorative justice. In addition, the Energy Equity Project's concept of energy equity promotes a "bottom-up" approach to advancing equity by recognizing the unique circumstances and needs of communities that have been historically marginalized and underserved, while also including them in the decision-making process. This "bottom-up" approach draws heavily on the environmental justice framework, which upholds the fair treatment and meaningful involvement of all people regardless of race, color, national origin, income, or other demographic characteristics.

PSE presented its approach to conceptualizing energy equity to its Equity Advisory Group (EAG) for guidance and feedback. The EAG members appreciated the four-tenet construct and discussed alignment with the guiding principles of the EAG, centered on accessibility, affordability, and accountability. The EAG also suggested that PSE leverage communities' perspectives, knowledge, and understanding of energy equity in everyday, plain language rather than academic terms and definitions.

In collaboration with the EAG, PSE also hosted two equity forums with its EAG, community-based organizations, and community members. As of the date of filing this 2023 Biennial CEIP Update (the Biennial Update), PSE and the EAG are compiling a summary of those events. PSE recognizes that those events represent a model for ongoing engagement and will further support our understanding of what energy equity means to customers in named communities. We believe this is the kind of engagement the Commission envisioned in expecting "meaningful engagement" with the EAG, named communities and interested persons.[8]

➔ The equity forums are further detailed in Chapter 4: Public Participation.

4. PSE's Equity Guidance Tool

PSE aims to ensure systemic change, both internally and externally, in our processes to the benefit of the customers we serve, especially those that have been historically marginalized or underserved. In support of this vision, PSE's Energy Equity team developed a guidance tool to be used by internal departments when considering equity across the company. The Equity Guidance Tool describes the

7. See note 1, infra.
8. See Order 08, at ¶ 313.

four core tenets of energy justice and establishes a mechanism for use by internal teams to ensure PSE's progress towards addressing each tenet of energy justice. Equipped with this tool, illustrated below in Figure 3.1, PSE will seek to mitigate existing disparities and confer benefits for all, especially those that are overburdened by inequities in the energy system.

Figure 3.1: Equity Guidance Tool

In each of the four tenets, consider:
- What have you done for highly impacted communities and vulnerable populations?
- What measures are you able to provide in these areas?
  - Process measures (what's been done to incorporate energy equity, what changes have been made)
  - Engagement measures
  - Impact measures
- What's your progress and what are your future plans?
- Additional guidance and questions are provided below.

	Overview	Additional Guidance
Recognition Justice	**Understanding of historic and ongoing inequalities** and prescribes efforts that seek to reconcile these inequalities	• What are the disparities & root factors that have led to historic and current inequities? What are the deepest inequities that have been identified? • Have you identified the communities you're targeting? What are their characteristics (e.g., housing, energy burden, pollution, health, economic)? • What collaborative efforts are happening to identifying communities you're targeting?
Procedural Justice	Focuses on **inclusive decision-making processes** and seeks to ensure that proceedings are fair, equitable, and inclusive for participants, recognizing that marginalized and vulnerable populations have been excluded from decision-making process	• How are you being inclusive and accessible in your engagement in named communities? • Have you engaged with the right Community-Based Organizations? • How are you engaging named communities in legal / regulatory proceedings? • How are you using the feedback from named communities? How are you informing your decisions based on their feedback? • Are you co-creating programs, procedures with communities? • Is early engagement occurring with communities? Have you identified their burdens?
Distributional Justice	**Distribution of benefits and burdens** across populations. Aims to ensure marginalized and vulnerable populations do not receive inordinate share of the burdens or are denied access to benefits	• What have you done in your process(es) to incorporate energy equity? What changes have been made? • How are you measuring your impact on benefits & reduction of burdens? o Have you established baseline measures and able to track progress of impact? o What are you doing to measure community engagement? o Are benefits distributed equitably and fairly? What % of programs/projects are received by named communities? • Are at least 30% of benefits distributed to named communities?
Restorative Justice	Utilizes regulatory government organizations or other interventions to disrupt and address distributional, recognitional or procedural injustices and to correct them through **laws, rules, policies, orders and practices**.	• What do you see success looking like? • Are processes eliminating future inequities? • Do customers feel they are receiving the benefits? • Have we built a just energy system where it is accessible for all?

5. PSE's Equity Assessment Framework

In its 2021 CEIP, PSE developed the Equity Assessment Framework, its first strategic approach to incorporate equity in its clean energy programs and resources. PSE designed the Equity Assessment Framework to guide PSE in ensuring that (i) all customer groups—particularly those who have been historically marginalized—benefit from the clean energy transition and (ii) PSE's clean energy operations does not disproportionately burden any customer group. PSE developed this Equity Assessment Framework with feedback and engagement from the EAG, subject matter experts, and other interested parties.

To further refine its approach to energy equity, PSE retained ILLUME Advising (ILLUME) to evaluate the Equity Assessment Framework and highlight opportunities for additional alignment with the CETA, Commission direction, and PSE's equity objectives. ILLUME reviewed documentation related to the 2021 CEIP (e.g., testimony and public comments), attended public meetings of the EAG, interviewed PSE staff, and assessed similar efforts from other utilities and agencies.

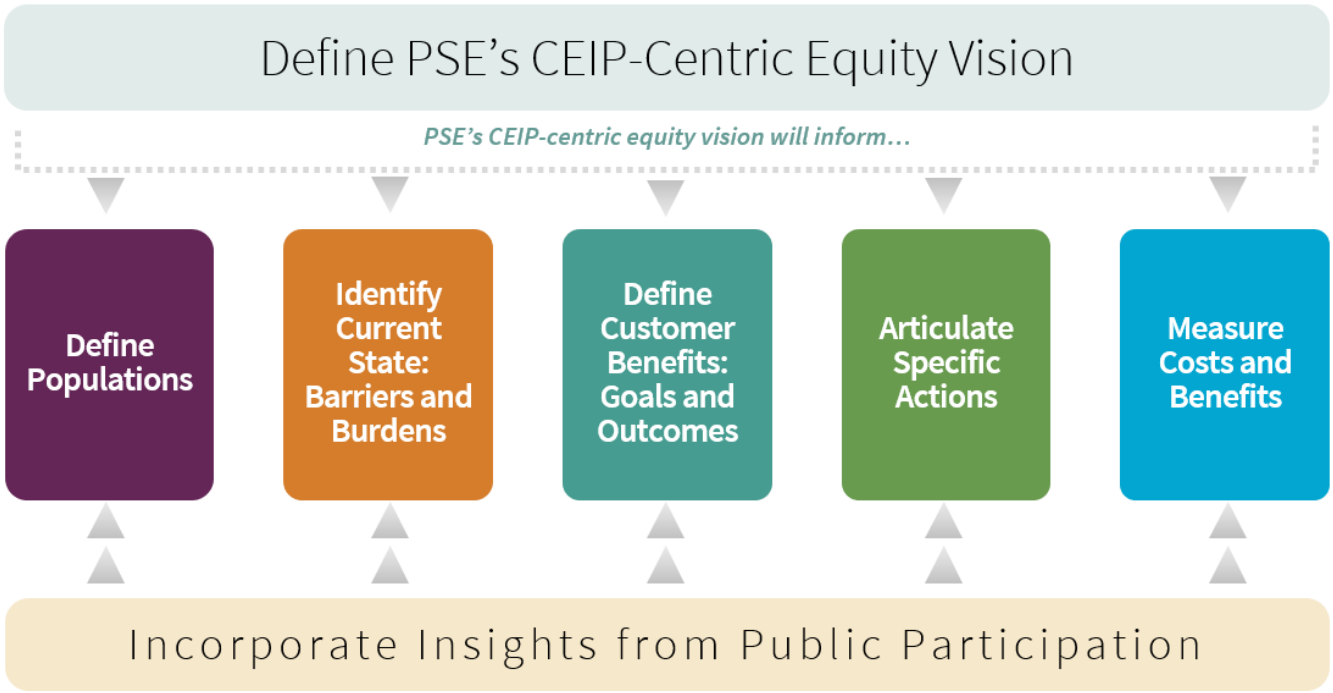
➔ See Appendix J: ILLUME Memorandum: PSE Equity Assessment Framework for additional details.

ILLUME suggested modifying the initial Equity Assessment Framework to reflect three important updates:

1. Defining PSE's CEIP-centric equity vision
2. Defining priority populations (including, but not necessarily limited to, named communities)
3. Defining measurable and achievable customer benefits

ILLUME's suggested modifications are illustrated in Figure 3.2.

Figure 3.2: ILLUME Advising Equity Assessment Framework



This revised Equity Assessment Framework represents an integrative approach to advance energy equity. Each element, or step, of the Equity Assessment Framework provides an input into another element. Combined, this Equity Assessment Framework reflects a holistic strategy to ensure that customers and communities that have been historically marginalized are identified and prioritized to benefit from PSE's clean energy transition.

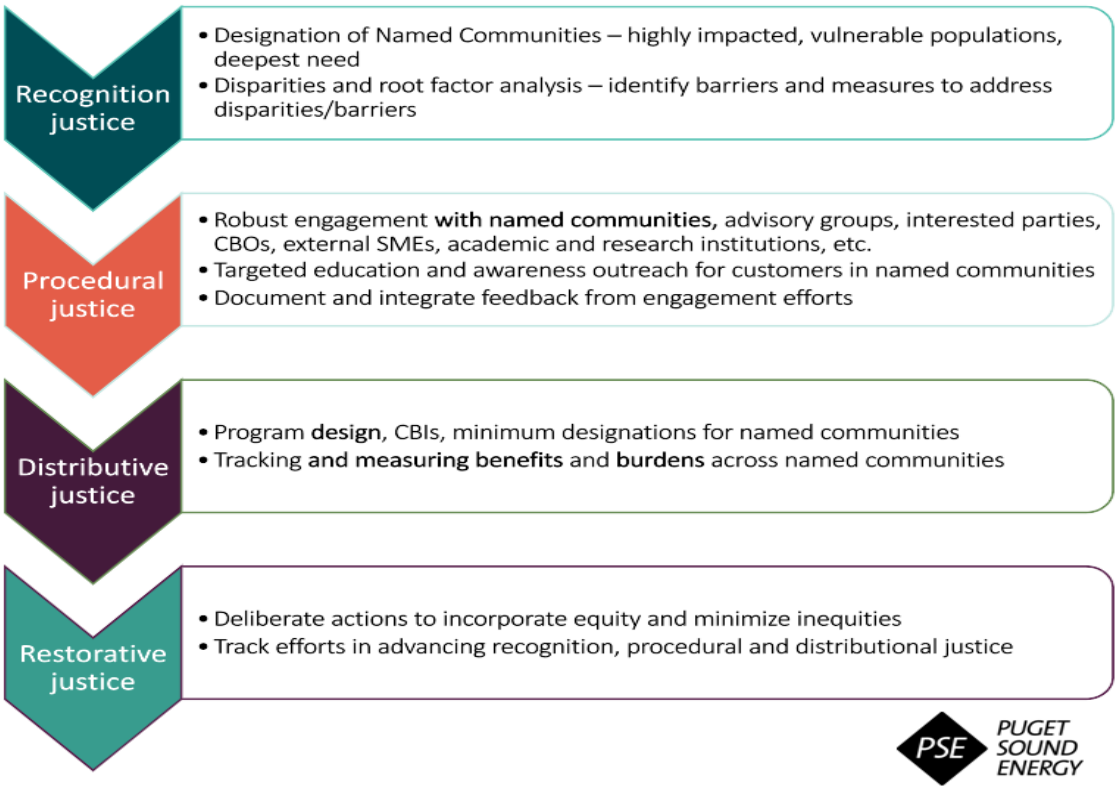
Following ILLUME's recommendations PSE integrated the four tenets of energy justice, as illustrated in Figure 3.3. For example, "defining populations" is a key consideration in recognition justice because it aims to designate and identify groups that have been historically marginalized or currently experience disparities. Similarly, "defining customer benefits" directly ties into distributional justice. By establishing targets to ensure benefits are realized by named communities, PSE focuses its outreach and programs

to meet these goals. By intentionally directing energy benefits into named communities, PSE promotes the equitable distribution of benefits and increases opportunities for customers in named communities to receive benefits, accounting for the reality that they may have been under-served in the past.

6. Integrating the tenets of energy justice in the CEIP

The definition of energy equity proposed by the Energy Equity Project and the core tenets of energy justice delineated in the Commission order in Docket UG-210755 set the parameters for incorporating equity across PSE's operations. Figure 3.3 describes PSE's efforts to advance the core tenets of energy justice in the CEIP.

Figure 3.3: Energy justice core tenets and the CEIP



6.1. Recognition justice

As described by the Commission order in Docket UG-210755, recognition justice requires an understanding of historic and ongoing inequalities and prescribes efforts that seek to reconcile these inequalities.

Recognition justice underlies many aspects of the CEIP, and the key elements of recognition justice include (1) identifying, defining, and mapping named communities and (2) identifying and tracking disparities in the clean energy system.

6.1.1. Defining, designating, and mapping named communities: highly impacted communities, vulnerable populations, and deepest need

CETA specifically identifies highly impacted communities[9] and vulnerable populations,[10] as groups that should benefit from the equitable distribution of energy and non-energy benefits and the reduction of burdens.[11] Through collaboration with the EAG, interested parties, internal and external subject matter experts, and a demographic analysis of the electric service territory, PSE has sought to understand, define, and identify customers in "named communities," a term that refers, collectively, to highly impacted communities and vulnerable populations.

Customer groups within named communities bear a disproportionate burden of environmental risk and have historically faced barriers to clean energy benefits. This includes customer groups marginalized by race, income, language, disability, housing status, immigration background, age, and other vulnerability factors. To gain context and visibility into these customer groups, their vulnerabilities, and their energy-related needs, PSE utilizes data on named communities. With this data, PSE can prioritize customers with the highest energy needs and vulnerabilities and work directly with them to address their needs across the energy system.

We will also utilize data on named communities to inform and implement its clean energy initiatives and programs to ensure that all customers, especially those that have been historically underserved or disproportionately burdened, are able to meaningfully participate in the decision-making processes and benefit from clean energy resources, regardless of their sociodemographic characteristics or geographic locations. These efforts are not only key to recognition justice, but they also set the background or context to address procedural and distributional justice.

Since issuance of the 2021 CEIP and following the Commission's order in Docket UG-210755, PSE has revised its definition of named communities. Specifically, PSE revised its definition of vulnerable populations and has defined the term "deepest need," both of which are discussed below.

6.1.2. Highly impacted communities

CETA defines the term "highly impacted communities" as "a community designated by the department of health based on cumulative impact analyses in RCW 19.405.140 or a community located in census tracts that are fully or partially on "Indian country" as defined in 18 U.S.C. Sec. 1151."[12] The Washington State Department of Health identifies highly impacted communities via the Environmental Health Disparities Map.[13]

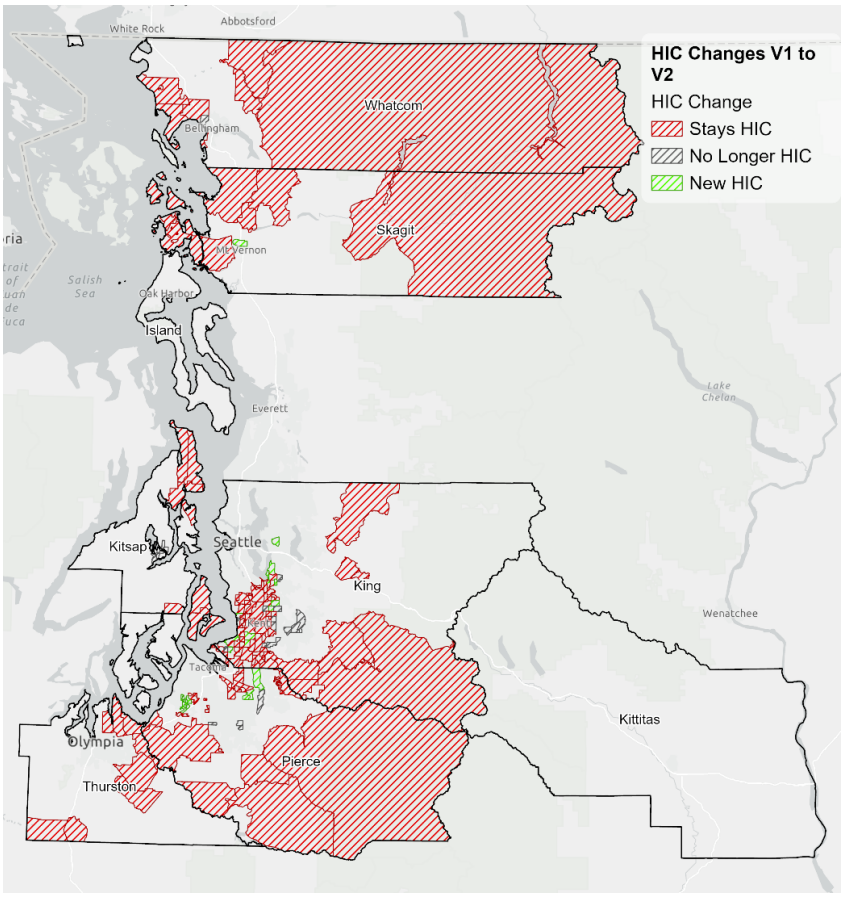
The Washington State Department of Health identifies highly impacted communities by groups of factors measuring environmental exposures and effects, indicators of sensitive populations, and some

9. See RCW 19.405.020(23) (defining "highly impacted community").
10. See RCW 19.405.020(23) (defining "vulnerable populations").
11. See, e.g., RCW 19.405.040(1).
12. RCW 19.405.020(23).
13. See Washington State Department of Health, Washington Environmental Health Disparities Map.

socioeconomic indicators. These factors are ranked 1–10 scale, and census tracts assigned a score of 9 or 10 are classified as highly impacted communities. A tract may also be classified as a highly impacted community if it does not have a score of 9 or 10 but does intersect “Indian country,” as defined in 18 U.S.C. Sec. 1151.

Since issuance of the 2021 CEIP, PSE has not changed the definition of highly impacted communities. The Washington State Department of Health, however, released a second version of the Environmental Health Disparities Map in 2022, updating data resources and adjusting to three environmental exposure indicators. After this update, 286 tracts in PSE’s electric service area remained highly impacted communities, 10 tracts in PSE’s electric service area became highly impacted communities, and 20 tracts in PSE’s electric service area no longer remained highly impacted communities. Figure 3.4 below displays the updated highly impacted communities across PSE’s electric service area. In total, approximately 27 percent of PSE’s electric residential customers (approximately 283,000 residential customers) reside in highly impacted communities.

Figure 3.4: Updates to highly impacted communities



6.1.3. Vulnerable populations

CETA defines the term “vulnerable populations” as communities that experience a disproportionate cumulative risk from environmental burdens due to:

1. Adverse socioeconomic factors, including unemployment, high housing and transportation costs relative to income, access to food and health care, and linguistic isolation
2. Sensitivity factors, such as low birth weight and higher rates of hospitalization[14]

To further understand the scope of vulnerabilities and unique circumstances and capabilities of vulnerable populations, PSE sought input from its EAG in 2020, through public outreach, engagement, and collaborative efforts. The EAG expanded the primary list and added factors derived from their collective experience and interactive sessions with PSE. Vulnerable populations are defined at the geographic level using census blocks groups across the service territory. PSE uses the data for each factor of vulnerability and applies it to each census block group to determine the degree of vulnerability.

In the Commission's Order 08[15] accepting the 2021 CEIP, subject to conditions, two (2) of the conditions — Condition 9 and 10 — related to vulnerable populations:

- Condition 9, which requires PSE to include certain metrics within the list of vulnerable populations[16]
- Condition 10, which requires PSE to include certain modifications to the designation methodology for vulnerable populations[17]

Initially, PSE implemented the requirement of Condition 9 by including a specific list of additional factors in the definition of named communities. However, PSE found that such inclusion resulted in a reclassification of nearly all of the block groups in PSE's service territory as high vulnerability, which did not seem to be the result intended by the Commission in Order 08. Upon reflection on the intent of Condition 9 and after conferring with NW Energy Coalition and Commission staff, PSE refined the approach to incorporate factors that, in the words of the Commission, "truly renders communities vulnerable."[18] To meet the requirements of Condition 10, PSE modified the vulnerability classification by:

- Selecting percent versus count score for a factor instead of including both to remove multiple measures of the same factor
- Selecting one measure of a vulnerability factor where multiple measures were present
- Replacing data sets with more current research; PSE replaced its heat island data with newly released data from the University of Washington Center for Health and Global Environment (CHanGE)

14. RCW 19.405.020(40)
15. In the Matter of Puget Sound Energy Clean Energy Implementation Plan Pursuant to WAC 480-100-640, Docket UE-210795, Order 08 (June 6, 2023).
16. See Docket UE-210795, Order 08 (June 6, 2023), Appx A at ¶ 11.
17. See Docket UE-210795, Order 08 (June 6, 2023) at ¶ 12.
18. See Order 08, infra note 15, at ¶ 154.

- Adding new measures of vulnerability including data from the University of Washington Center for Health and Global Environment classifying health factors associated with high heat risk, wildfire risk derived from the U.S. Forest Service, and housing quality from the U.S. Department of Housing and Urban Development[19]

The modifications required by Conditions 9 and 10 resulted in adjustments to classifications at the census block group level. Of the 1,613 census block groups in PSE's electric service territory:

- 74 percent of the census block groups retained the same vulnerability classification
- 12 percent of the census block groups increased in vulnerability
- 14 percent census block groups decreased in vulnerability

In the new classification, approximately:

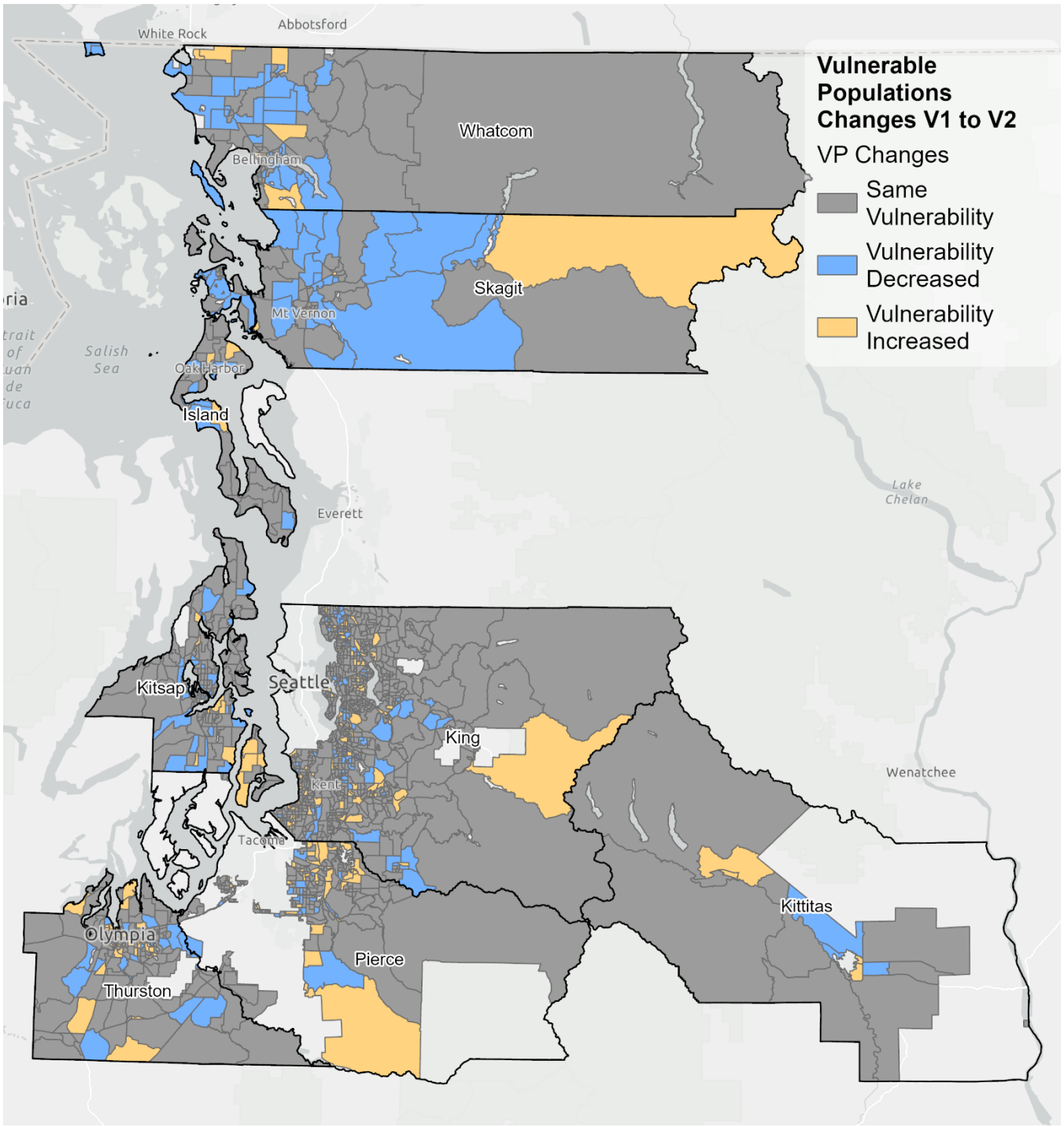
- 342,000 residential customers (33 percent of all residential electric customers) are in high vulnerability block groups
- 386,000 residential customers (36 percent of all residential electric customers) are in medium vulnerability block groups
- 337,000 residential customers (31 percent of all residential electric customers) are in low vulnerability block groups

None of the changes in vulnerability designations were concentrated in any single part of PSE's electric service territory.

➔ See Appendix I: Vulnerable Populations and Deepest Need Methodology.

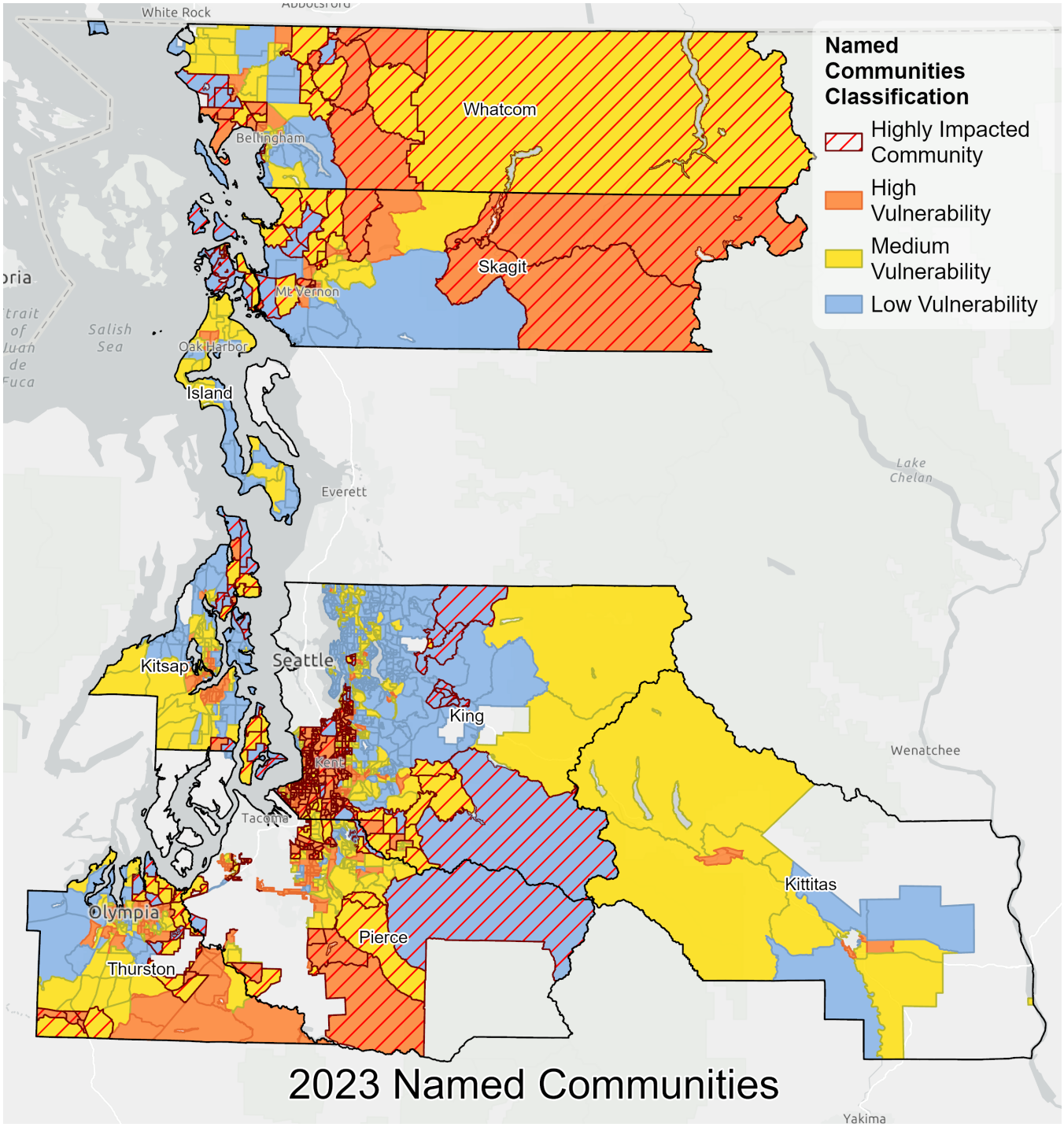
19. PSE also acquired data mapping racially restricted covenants in PSE's electric service area from the University of Washington Civil Rights and Labor History Consortium; however, PSE did not use this data in the cumulative index due to timing and the need for additional evaluation and understanding of the data set.

Figure 3.5: Updates to vulnerable populations in PSE's electric service area[20]



20. This map displays 2010 census block groups, whole or portions, intersecting with PSE's electric service territory. Areas of census block groups extending beyond PSE's electric service territory are not shown.

Figure 3.6: Updated mapping of named communities in PSE's electric service area[21]



21. This map displays 2010 census block groups, whole or portions, intersecting with PSE's electric service territory. Areas of census block groups extending beyond PSE's electric service territory are not shown.

6.1.4. Deepest need

Condition 20 in Order 08 required PSE to develop "a targeting approach to identify the customers and communities with deepest need within the broader category of named communities in consultation with interested persons and advisory groups."[22] To comply with this condition, PSE started with the elements specified in Conditions 9 and 10 and the requirements in Condition 20, while recognizing that the term "deepest need" was not defined in Order 08. Using that information, PSE sought direction from the EAG, met with staff from Front and Centered, the NW Energy Coalition, and their outside consultant, to hear perspectives on how to best define the phrase "deepest need" and integrate the concept into PSE's approach. As discussed in Chapter 4: Public Participation, one of the concerns voiced was to capture neighborhoods of vulnerability. PSE's electric service area tends to be characterized by suburban and some rural areas where there may be small pockets of vulnerability obscured by the larger community.

After review of the literature, PSE discovered no formal definition of the concept "deepest need," although PSE considered research on deep poverty and deep disadvantage as informative, with "deep poverty" defined by the U.S. Census Bureau as living in a household with total cash income that is below fifty percent of the federal poverty threshold. PSE discussed these research findings with the Equity Advisory Group, the Low-Income Advisory Committee, and the Conservation Resource Advisory Group in a joint meeting on August 7, 2023,[23] and asked if there existed other research that PSE should consider in defining the concept of "deepest need." In subsequent conversations, the NW Energy Coalition suggested a threshold of severe energy burden could approximate the deep poverty threshold because the severe energy burden standard aligns with the goal of CETA to reduce energy burden. With that suggestion in mind, PSE agreed it was a reasonable starting point to identify customers and communities with deepest need and then include an analysis of compounding factors affecting those customers and communities.

As detailed in Appendix I: Vulnerable Populations and Deepest Need methodology, PSE used a revised method (i) to identify customers with severe energy burden[24] or 10 percent or more of income allocated to household energy expenses in groups or clusters throughout its service area and (ii) added a second screen of areas with high counts of customers with severe energy burden. This was the first step to identify customers and communities with deepest need.

The second step was to consider non-economic factors in the definition, as suggested during the joint advisory group discussions. Once the group of customers were selected at the severe energy burden

22. See Order 08, infra note 15, Appx. at ¶ 22.
23. See Appendix C: Public Participation for Meeting Summary and Feedback Report for this meeting.
24. Severe Energy Burden is not referenced in CETA as a required threshold, but used by the American Council for an Energy-Efficient Economy. See American Council for an Energy-Efficient Economy, How High Are Household Energy Burdens? An Assessment of National and Metropolitan Energy Burden across the United States (Sept. 2020).

threshold, PSE layered these non-economic, compounding factors identified in the Commission's Order 08, the advisory groups, and interested parties, including areas with:

- Customers with high arrearages
- Higher rates of disconnections
- Higher concentrations of customers renting homes
- Higher populations of customers belonging to Black, Indigenous, People of Color (BIPOC) communities
- Longer commutes
- Limited English
- Poor housing quality
- Rural U.S. Census designation
- Extreme heat risk factors (Climate)
- Extreme heat risk factors (Landscape)
- Human Physical Health vulnerability factors
- Preexisting Medical conditions
- Higher social isolation for older adults
- Higher risk for wildfire
- Intersection with Tribal Land Parcels

Through this process, PSE defined customers and communities with deepest need as those living in areas identified as clusters of severe energy burden and multiple compounding factors hindering the ability to access adequate resources.

Additionally, PSE will integrate a third layer of qualitative information from its engagement teams, consisting of PSE's Community Affairs, Community Outreach, and Local and Governmental Affairs groups, to "ground truth" these factors. The nature of the quantified data is necessarily static for a given period, but the conditions for communities and customers are dynamic. Collectively, PSE's engagement teams maintain and update information as it changes in real time. This element of PSE's deepest need information will provide perspective to incorporate with quantitative data and help prioritize engagement. For example, when there are known conditions at a given site such as a community-based organization's capacity to engage with a given initiative at a given moment that may direct PSE to work at another location or muster additional supportive resources to engage effectively at a given site.

These three layers all inform how PSE identifies and prioritizes engagement with customers and communities in the deepest need. This, in turn, fosters productive engagement in the procedural justice

quadrant to co-create solutions delivering the benefits by tranche of resources as directed by Condition 20.

Table 3.1: Breakdown of PSE residential customers by named communities

All Electric PSE customers	HIC	VP High	Deepest Need*
1,065,508	283,000	342,000	68,000
100%	27%	33%*	6%

** The average may differ slightly based on rounding.*

6.1.5. Disparities analysis in clean energy programs

An essential step in energy equity is the identification of where disparities exist in the clean energy system and examining the underlying causes or factors that may be exacerbating existing disparities. There are numerous definitions of disparity, but many have a common theme. Disparity generally refers to the differences in outcomes and conditions for some groups of people compared to other groups because of unequal treatment or disproportionate access to programs or services.[25] Clean energy system disparities manifest in the lack of access to clean energy resources, technology, or programs and the unequal distribution of benefits and burdens from deploying clean energy resources. The underlying factors creating or exacerbating disparities in the clean energy system are diverse, complex, evolving, and interdependent in nature. They are evident in unequal social, economic, and environmental conditions.[26]

Analyzing disparities in PSE's clean energy programs is integral to the success of PSE's equity initiatives. This analysis could also inform efforts that address procedural and distributional justice, by ensuring that those customer groups experiencing the greatest disparities have input in the design, planning and implementation of programs, and are prioritized in receiving the benefits of the clean energy system. The section below summarizes the findings of a disparity analysis conducted by PSE in energy efficiency.

25. R. Fong, et al. (eds.), Addressing Racial Disproportionality and Disparities in Human Services: Multisystemic Approaches, Columbia University Press (2014).
26. B. Smedley & S. Syme, "Understanding and Reducing Socioeconomic and Racial/Ethnic Disparities in Health," in Promoting Health: Intervention Strategies from Social and Behavioral Research, National Academies Press (US) (2000).

Summary of findings of the disparity analysis — energy efficiency programs, 2022

This disparity analysis aims to articulate and illustrate customer participation in energy efficiency programs among defined named communities for calendar year 2022.[27] In the context of this analysis, PSE defined 'disparity' as a percentage of energy benefits that is lower than the percentage of that community relative to all customers. The following equation illustrates the approach:

$$\frac{\text{Customers in Named Communities}}{\text{Total Customers (Electric Only and Dual Fuel*)}} < \frac{\text{Energy Benefits in Named Communities}}{\text{Energy Benefits}}$$

Tables 3.2 and 3.3 provide a synthesis of the findings. These tables represent a comparison of customers grouped within named communities as it relates to energy benefits, defined as incentives, and MWh savings. Incentives reflect the dollars customers receive for participating in some energy efficiency programs. MWh reflects the energy customers saved through their participation in energy efficiency programming. Energy benefits mirror the percentage of MWh saved, in named communities, through participation in energy efficiency programs. PSE's electric customers studied for this report include the 27 percent of PSE electric customers in highly impacted communities and the 38 percent of PSE electric customers grouped in the high vulnerable population segment.

Table 3.2: Distribution of incentives and energy benefits to highly impacted communities (2022)

HIC	% of Population	Total Incentives Distributed	% of Incentives	Difference in Incentives Distribution	MWhs Distributed (Energy Benefits)	% of Energy Benefits (EBs) Distributed	Difference in EBs Distributed
Yes	27%	15,800,601	32%	5%	71,402	34%	7%
Total	-	48,938,485	-	-	212,713	-	-

Table 3.3: Distribution of incentives and energy benefits to vulnerable populations (2022)

VP	% of Population	Total Incentives Distributed	% of Incentives	Difference in Incentives Distribution	MWhs Distributed (Energy Benefits)	% of Energy Benefits (EBs) Distributed	Difference in EBs Distributed
High	38%	22,528,467	46%	8%	87,034	41%	3%
Total	-	48,938,485	-	-	212,713	-	-

27. The report uses categories of named communities as defined in the 2021 CEIP, prior to the Commission's Order 08, in which PSE received new equity guidelines and conditions.

As seen in Tables 3.2 and 3.3, during the 2022 reporting period:

- Customers in highly impacted communities received 34 percent of energy benefits (7 percentage points above the percentage of the target customer population)
- Customers in highly impacted communities received 32 percent of incentives (5 percentage points above the percentage as the target population)
- Customers in high vulnerable populations received 41 percent of energy benefits (3 percentage points above the population's percentage) were distributed during the same period
- Customers in high vulnerable populations received 46 percent of incentives (8 percentage points above of the percentage of the customer population)

Within named communities, PSE's analysis did not reveal disparities in the distribution of energy benefits (incentives and MWh savings) for the calendar year 2022. The analysis did reveal, however, that a higher percentage of energy benefits (incentives and MWh savings), compared to the overall customer base, were directed to customers in named communities (high vulnerable populations and highly impacted communities).

Considering the scope of vulnerabilities and diverse characteristics of customers in named communities, PSE acknowledges that there still may be systemic barriers or factors that hinder participation in energy efficiency programs. PSE continues to strengthen its design and delivery of programs to help customers in named communities overcome these barriers.[28] Examples of barriers to participation and efforts to mitigate those barriers are illustrated in Table 3.4.[29]

28. For detail about future specific actions by energy efficiency programs that will address barriers to participation by members of named communities, please see the 2024-2025 Biennial Conservation Plan (BCP). The Overview document includes an Equity Focus chapter that describes the team's strategy and tactics. That document also includes a summary of each program, including '" equity focus"' sections within applicable programs that describe how they will support increased participation in named communities.
29. Details of program descriptions and achievements can be found in the 2022 Annual Conservation Plan (ACP).

Table 3.4: Barriers to participation and efforts to mitigate in energy efficiency programming

Barriers to participation	Efforts to mitigate barriers
Financial limitations	Increased incentives for income-qualified customers across a variety of residential efficiency programs. Customer education about low-cost or no-cost ways to save energy even without direct participation in a program.
Renting vs owning	Programs, such as Multifamily Retrofit and Small Business Direct Install, that include free energy assessments, education, and low-to-no cost efficiency upgrades and support for owners to make additional upgrades to benefit tenants
BIPOC (Black, Indigenous, and other People of Color)	Culturally relevant marketing, outreach, and events, including transcreation of collateral and in-language staffing, to learn from customers and support their goals with program awareness and options.
Educational Attainment (GED Count)	Accessible program materials including informal guides to help customers understand their options to participate and the benefits that participation can bring.

Building on the findings of the disparity analysis, PSE recognizes that addressing these barriers to participation should be a priority, along with directing benefits to customers in named communities. Going forward, PSE will continue to:

1. Refine (or develop) and implement measures to identify and track disparities in the distribution of benefits resulting from participation in clean energy programs
2. Review clean energy programs and participation rates to identify potential barriers to participation within named communities
3. Seek customer and community input in the design and refinement of programs to mitigate disparities or participation barriers
4. Focus efforts to improve access to clean energy programs and direct benefits to target customer groups

6.2. Procedural justice

As stated by order of the Commission in Docket UG-210755,[30] procedural justice involves creating an inclusive and accessible process for the authentic engagement and representation of communities that have been historically excluded or marginalized in the development and implementation of clean energy programs.[31]

PSE recognizes that robust public engagement is needed to ensure community voices are heard and infused throughout the design, implementation, and evaluations of our clean energy programs. To

30. WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022).
31. WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022) at ¶ 56.

further this objective, PSE filed a public participation plan in May 2023.[32] The public participation plan describes a variety of mechanisms (tactics and strategies) for proactively and meaningfully engaging with PSE customers across different geographic and demographic segments.

A priority of the public participation plan is to establish an environment that allows community members/customers within named communities to make meaningful contributions and to share their input or feedback with respect to the development and implementation of clean energy programs. The public participation plan also devises methods and mechanisms for documenting and incorporating communities' feedback and insights into the design, planning and implementation of clean energy programs.

➔ For more details see Chapter 4: Public Participation.

Collectively, PSE acknowledges the importance of understanding the cultural perspectives of diverse customer populations to meet their unique needs. PSE is also aware of power dynamics and recognizes the value and expertise provided through engagement with community-based organizations, advisory bodies, community leaders, interested parties, and our broader customer base. Drawing on the strategic community engagement efforts deployed by PSE's clean energy programs — demand response, distributed energy resources, and energy efficiency — key insights gathered include:

- Customers in named communities are highly diverse, requiring culturally relevant approaches and outreach strategies that resonate with them.
- Building attentive and intentional partnerships with community members, advisory groups, community-based organizations, and community leaders can help establish trust and foster a collaborative environment.
- Consistent and targeted customer education and awareness is crucial to eliminate barriers and illuminate pathways for authentic community engagement and participation.
- Adopting community/customer-centered approaches fosters authentic engagement and is mutually beneficial.
- Customer feedback drives continuous improvements and allows for the design and implementation of programs, products, or services that align with customer expectations.
- Accessible meeting locations, access to technology, translation/interpretation services, flexible timing, and childcare provisions should be taken into consideration to enhance an equitable community participation.

32. Puget Sound Energy, Public Participation Plan Update: Clean Energy Implementation Plan, May 2023 – April 2025, Docket UE-210297 (May 1, 2023)

We continue to prioritize community engagement and will incorporate insights gathered as we design and implement our clean energy programs. Additionally, PSE will continue to evaluate its engagement strategies and tactics for reaching diverse customer groups, especially those in highly impacted communities, vulnerable populations, and communities and customers in deepest need.

6.3. Distributional justice

As stated by order of the Commission in Docket UG-210755,[33] distributional justice is the fair distribution of benefits and burdens across populations. This objective aims to ensure that marginalized and Vulnerable Populations do not receive an inordinate share of the burdens or are denied access to benefits.[34]

Directing the benefits of a clean energy system to communities that have been historically and currently marginalized is at the core of distributional justice. As it relates to the CEIP, the key elements of distributional justice include customer benefit indicators (CBIs) and associated metrics, identifying barriers and burdens across named communities, and the minimum designation of benefits across tranche of resources.

6.3.1. Customer benefit indicators and metrics

To ensure that the benefits of the transition to clean energy are directed to all customers, especially those in named communities, PSE developed eleven CBIs that correlate with the CETA categories in the 2021 CEIP. As discussed in Chapter 6: Customer Benefit Indicators, PSE added two (2) more CBIs as a result of the Commission's conditions in Order 08. PSE developed the initial CBIs through an iterative process in collaboration with its EAG. The CBIs incorporate information on the benefits PSE's customers desire (or expect) in the transition to a clean energy system. These benefits include improved participation in clean energy programs, increased culturally- and linguistically-accessible program communications, reduced greenhouse gas emissions, improved community health, and others.

➔ For more details, please see Chapter 6: Customer Benefit Indicators.

For example, PSE utilized these CBIs and metrics in RFP processes for utility-scale and distributed energy resources. We include equity and customer benefits considerations in each phase of its RFP evaluation process. Bidders or developers may provide an equity and customer benefit plan demonstrating their proposal's alignment with CETA goals, namely energy security and resiliency, energy and non-energy benefits, environment, and public health benefits. In the utility-scale RFP evaluation, PSE graded proposals based on the degree to which the equity and customer benefit plan

33. WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022).
34. Id. at ¶ 56.

addressed one or more of the customer benefit indicator categories. This category carried the highest weight of the six categories in the qualitative portion of the evaluation.

6.3.2. Tracking progress in achieving customer benefits

To track progress most effectively in achieving customer benefits, PSE also established metrics for each CBI. These metrics offer a baseline or reference point against which implemented programs can be evaluated, revised and/or improved. Together, the CBIs and metrics serve as tools to guide PSE in the shaping of programs, actions, and investment decisions. The CBIs and metrics are guiding benchmarks for PSE in tracking and monitoring progress towards advancing distributional justice.

For instance, to evaluate PSE's progress in improving participation of named communities in clean energy programs, PSE will use metrics to track and measure participation rates in energy efficiency, demand response, and distributed energy resource programs for all customers, especially those in highly impacted communities and vulnerable populations. The insights gathered using CBIs and metrics will enable PSE to:

- Identify where disparities or gaps exist in program participation
- Identify significant burdens and barriers (or root factors) that restrict customers from participating in clean energy resources/programs
- Identify and prioritize those communities and customers with the deepest need and/or with significant barriers/burdens to participation

These insights equip PSE to reach those communities and customers in deepest need or with significant barriers/burdens and ensure that they can participate and benefit from the clean energy economy through design programs, resources, and strategies.

6.3.3. Identify barriers and burdens across named communities

In keeping with the principles of distributional justice, PSE is taking steps to identify systemic barriers that may exclude customers in named communities from directly benefiting from the clean energy system. PSE is implementing strategies to mitigate barriers to participation through product design and partnering with community-based organizations and community stakeholders. For instance, through community engagement efforts designed to identify barriers and burdens to participation in DER – Solar programs, the issue of cost was consistently highlighted by customers as the largest barrier throughout the community engagement process. As a result, PSE's product design for Schedule 667 includes additional financial benefits for named communities and service providers to offset the cost of installing customer-owned solar on properties in named communities. An upfront incentive and interconnection allowance, offered to named communities and service providers, is in addition to the credit for energy purchased by PSE that is available to all customers through this tariff schedule.

By implementing strategies that mitigate barriers to participation, PSE is making efforts to direct benefits to customers in named communities, while also reducing disparities in participation/access to

clean energy resources. A reduction in disparities means that PSE is moving towards greater distributional justice.

6.3.4. Minimum designation of energy benefit across tranche of resources

To ensure benefits are directed or flow to customers in named communities, the Commission included Condition 20 in Order 08:[35]

> **CONDITION 20**: Designate for Named Communities a minimum of 30% of the energy benefits of its DER solar, DER storage, DR, and EE programs, with benefits measured across each tranche of resources. PSE will commit to developing a targeting approach to identify the customers and communities with Deepest Need within the broader category of Named Communities in consultation with interested persons and advisory groups. By the 2023 Biennial CEIP Update, PSE will designate a minimum percentage of energy benefits that will flow to Named Communities with Deepest Need.[36]

First, PSE developed a working definition of energy benefits and held joint advisory group meetings and workshops to understand how PSE should interpret energy benefits. PSE initially suggested using MW and MWh, as suggested by NW Energy Coaltion. Members of advisory groups voiced concerns with this approach, in that it does not demonstrate the tangible benefits customers would realize. PSE recognizes the gap between technical terms of MWs and MWhs and the difficulty in translating these technical terms to tangible benefits, like utility bill reduction, emission reductions, etc. Although PSE shows a MW and MWh for energy benefits in the table below, PSE will continue to explore how to illustrate and tie tangible benefits from these programs to the MWs and MWhs.

After defining deepest need and evaluating the existing barriers and challenges of developing programs for communities and customers in the deepest need, PSE developed a minimum designation of energy benefits focused on communities and customers in the deepest need. We designate 2.5 percent as a minimum percentage for the remainder of the CEIP period, achieving the energy benefits in Table 3.5 for communities and customers in deepest need by 2025.

Table 3.5 Distribution of energy benefits by tranche of resources

Tranche of resources	Target by 2025	Named communities (30% by 2025)	Deepest need (2.5% by 2025)
Energy Efficiency	397,620 MWh	104,987 MWh*	3,727 MWh**
Demand Response	86.0 MW	25.8 MW	1.15 MW***
Distributed Solar	80.0 MW	24.0 MW	2.0 MW
Distributed Storage	25.0 MW	7.5 MW	0.6 MW

* Does not include savings from NEEA and Schedule 258

** Reflective of the portion of MWh savings attributable to residential EE programs for existing buildings. See Chapter 5

*** Reflects only programs targeted towards residential customers

35. In the Matter of Puget Sound Energy Clean Energy Implementation Plan Pursuant to WAC 480-100-640, Docket UE-210795, Order 08 (June 6, 2023).
36. See Order 08, infra note 3, Appx. A at ¶ 22.

After developing a strategy for engagement, program design, and implementation as well as gaining a better understanding of the programmatic needs of communities and customers in deepest need, PSE will reexamine this minimum designation for the 2025 CEIP. We acknowledge that we heard from some advisory group members in the joint advisory group meetings that the minimum designation should mirror the percentage of the population in deepest need. If PSE were to take such an approach in this 2022-2025 compliance period, the minimum percentage would be 6 percent.

While PSE aspires to have the energy benefits match the percentage of communities and customers in deepest need at the outset, PSE needs additional time to improve its effectiveness in reaching these communities and customers and designing programs to meet their needs. It is important to acknowledge that PSE has never designated a minimum designation for targeting those communities and customers in deepest need, nor is there any precedent to follow. We will strive to meet this 2.5 percent designation by the end of the 2022-2025 compliance period but also realize that we have a lot of new work to do in this space.

Additionally, PSE heard the joint advisory group discuss the challenges in reaching communities and customers in deepest need, like trust, education, and language barriers. To work through these challenges, we must engage in outreach, target engagement, remove specific barriers in program design, and use lessons learned to develop programs/products specifically for communities and customers in deepest need. This breadth of insight and engagement will require longer than the two years remaining in this 2022-2025 compliance period. Accordingly, PSE will continue to work towards its goal of increasing the minimum percentage in the upcoming 2026-2029 compliance period as PSE builds upon the work being done now to meet the 2.5 percent designation by the end of the 2022-2025 compliance period.

Finally, PSE will continue to make strategic efforts to develop, refine, and implement key elements of distributional justice. This includes, but is not limited to:

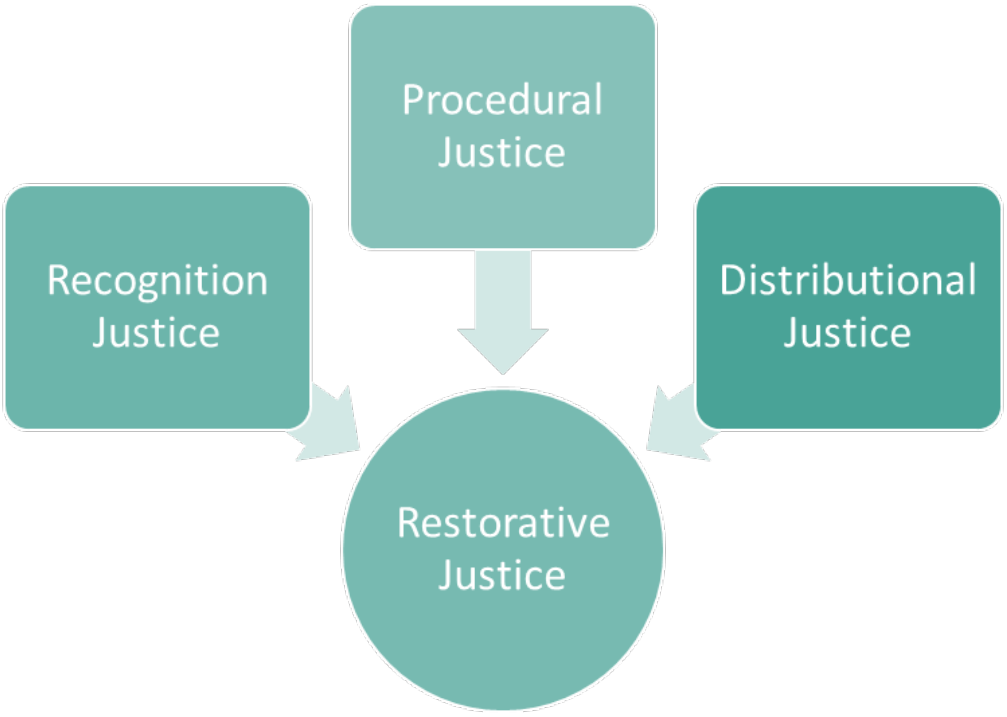
- Refining CBIs and metrics for future CEIPs focusing on CBIs within PSE's control
- Identifying barriers and burdens experienced by customers in named communities, including communities and customers in deepest need
- Identifying PSE's actions through its CEIP that could potentially eliminate barriers and promote the equitable distribution of benefits
- Developing robust outreach strategies and inclusive practices for soliciting feedback from customers on how best to equitably direct or distribute benefits to address their needs
- Monitoring and tracking progress in meeting customers' expectations and needs
- Exploring methods to translate MW and MWh metrics into tangible benefits for communities and customers in the deepest need

6.4. Restorative justice

As described by the Commission order in Docket UG-210755,[37] restorative justice uses regulatory government organizations or other interventions to disrupt and address distributional, recognition, or procedural injustices, and to correct them through laws, rules, policies, orders, and practices.[38]

To advance restorative justice, PSE envisions a synthesized or integrated approach, as demonstrated in Figure 3.7 below. This approach is built on the three core tenets of energy justice — recognition, procedural, and distributional justice. Efforts to address recognition justice (identifying customer groups that have been excluded from the clean energy system) set up the context to advance procedural justice (by ensuring that these customer groups can meaningfully participate in the design, planning and implementation of clean energy programs) and distributional justice (by ensuring that they are prioritized to receive the benefits of the clean energy system).

Figure 3.7: An integrated approach to restorative justice



Altogether these efforts seek to advance restorative justice — mitigating past inequities and directing energy and non-energy benefits to all customers, especially those in named communities.

37. WUTC v. Cascade Natural Gas Corp., Docket UG-210755, Order 09 (Aug. 23, 2022).
38. Id. at ¶ 56.

7. Conclusion

In summary, PSE has made, and continues to make, meaningful efforts to ensure that energy equity is at the center of the planning, designing, and implementation of clean energy programs and resources. These efforts are ongoing and iterative and are discussed throughout this Biennial Update. The strategies and best practices for incorporating equity in the CEIP processes include the Equity Guidance Tool and the Equity Assessment Framework. They are consistent with PSE's overall vision, strategy, and framework for energy equity.