2023 Biennial CEIP Update

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What is the 2023 Biennial CEIP Update?

- **Refines how we're delivering clean electricity through the remainder of the first implementation period (2023-2025)**
- **Responds to Commission decision issued on June 8, 2023**

Key updates:

- Integrating four tenets of energy justice
- Defining "deepest need" and related minimum designation
- Updating interim and specific targets
- Refining and substantially adding to specific actions
- Reporting on public engagement progress

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Progress in the four energy justice quadrants

Recognition justice

- Designation of Named Communities – highly impacted, vulnerable populations, deepest need
- Disparities and root factor analysis – identify barriers and measures to address disparities/barriers

Procedural justice

- Robust engagement with named communities, advisory groups, interested parties, CBOs, external SMEs, academic and research institutions, etc.
- Targeted education and awareness outreach for customers in named communities

Distributive justice

- Program design, CBIs, minimum designations for named communities
- Tracking and measuring benefits and burdens across named communities

Restorative justice

- Deliberate actions to incorporate equity and minimize inequities
- Track efforts in advancing recognition, procedural and distributional justice

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Updated interim target in the 2023 Biennial Update

2021 CEIP (approved in Order 08)	2023 Biennial Update (proposed)
63% in 2025	54.5%, 4-year average from 2022 to 2025

Purpose for change:

- Load forecast for CEIP period has increased significantly
- Forecasted renewable generation trending lower than expected
- Aligns with 4-year compliance periods starting in 2030
- Most new resources in All-Source RFP will not be online until after 2025

Additional guidance considered:

Order 08, Condition 3: "...PSE should also include an updated target if the 63 percent target is no longer viable by 2025"

WAC 480-100-640 (11) Biennial CEIP Update: " ….The utility must file its biennial CEIP update in the same docket as its most recently filed CEIP and include an explanation of how the update will modify targets in its CEIP."

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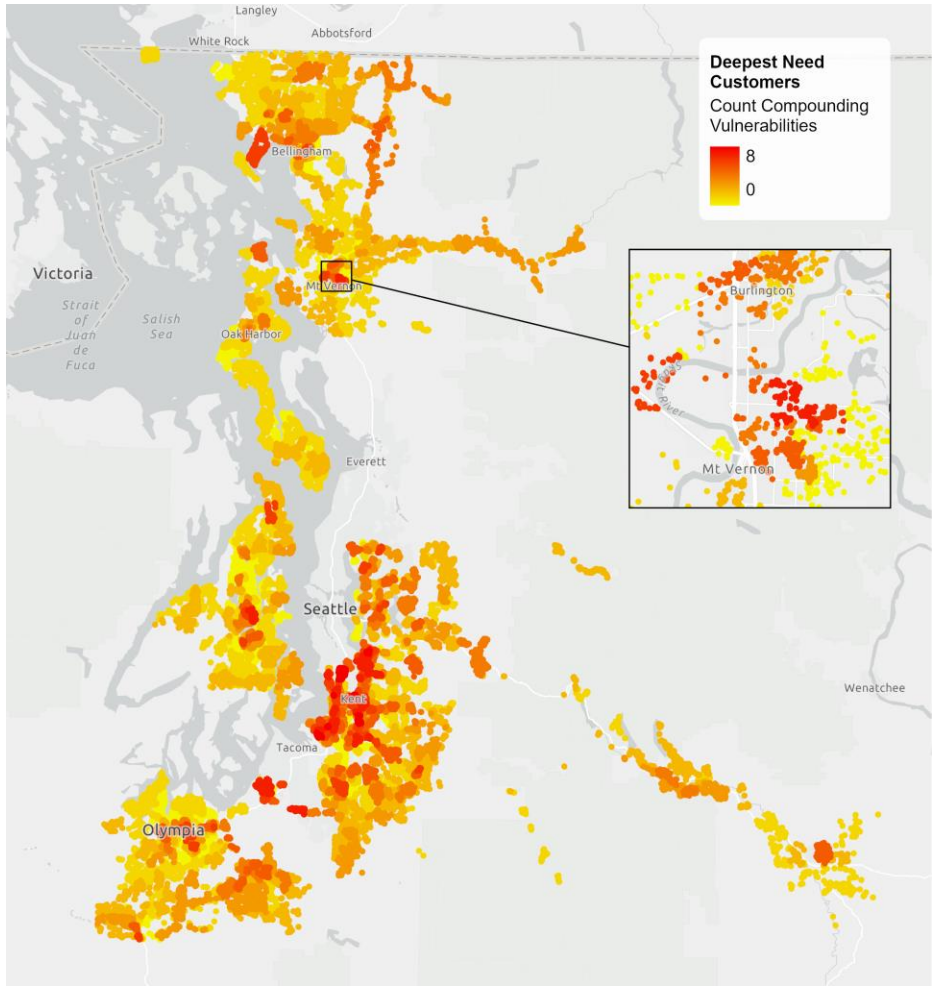
Defining “deepest need”

- Collaborated with PSE advisory groups through joint meetings
- Defined customers with deepest need as:
  - Living in areas identified as clusters of severe energy burden

    and
  - Experiencing multiple compounding factors hindering the ability to access adequate resources.
- ~65k customers

* *Severe energy burden is defined as households with energy bills that exceed 10 percent of the annual household income.*



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Minimum designation for customers with deepest need

- Deepest need is an entirely new concept with very uncertain outcomes
- Set 2.5% as initial designation for deepest need through 2025 with a focus on achievability, but there is much to learn
- Will evaluate feasibility in developing deepest need designation for the 2025 CEIP, with the goal of increasing the minimum designation based on lessons learned

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Status of conditions (overview)

- **28 conditions completed and addressed**
  - Vulnerable population definition and methodology
  - Specific actions
  - CBIs (new and revised metrics, directionality, report card)
  - Minimum designations
- **4 conditions in progress**
  - Incremental cost calculation
  - DER selection process
  - DER public engagement “empowerment” pilot
  - Addressing feedback

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Updated and new specific actions

- Energy efficiency
- Demand response
- Time-varying rates
- All-source RFP
- Distributed energy resources (solar and storage)

- Distributed energy resources enablement
- Grid modifications
- Energy assistance
- Leveraging public funding

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Robust customer engagement

Track	Advisory groups	Organizations that serve named communities	Surveys	Events in named communities
• 2023 Biennial CEIP Update	• 7 Equity Advisory Group (2 joint) • 4 Conservation Resource Advisory Group (2 joint) • 4 Low Income Advisory Committee (2 joint)	• 21 interviews	• ~70k recipients, 2,941 responses	• 2 Equity Forums • 4 co-staff festivals / farmers markets • 2 equity focused conferences
• Customer engagement	• 2 Equity Advisory Group	• 3 site visits	• 3,181 recipients, 1,311 responses	• 172 events attended • 4,283 in-person interactions
• Program design and delivery	• 4 Equity Advisory Group	• 61 participants in one or more calls, interviews, focus groups, or workshops	• 825 recipients, 202 responses	• N/A

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Appendix

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Specific targets

Type	2021 CEIP	2023 Biennial Update	Notes
Renewable energy target	10.5% (originally 63%, adjusted through compliance filing to show incremental)	11%	PSE agrees to WUTC Staff's condition to reflect the renewable energy target as a cumulative percentage, and reflect renewable energy (not all clean energy)
Energy efficiency	536,717 MWh (2022-23)	**397,820 MWh (2024-25)**	Updated based on 2024-2025 Biennial Conservation Plan
Demand response by 2025	23.7 MW	**86 MW**	Increased based on Commission order and cost-effective RFP resources
Distributed energy resources – solar by 2025	80 MW	80 MW	On track
Distributed energy resources – storage by 2025	25 MW	25 MW	On track

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Specific actions – energy efficiency*

Energy efficiency includes a variety of programs with a focus on reducing energy consumption and usage within customer homes and businesses

- Total 2024-2025 energy efficiency target = 397,820 MWh
- Named communities designation = 30% across programs*

Sample energy efficiency programs targeting Named Communities**

Program/Product	Description	MWh (2024-2025)	Year(s)	Counties
Low Income Weatherization	Home weatherization (e.g., windows, insulation) assistance for low-income customers	4,308	2024-25	All counties
Multifamily Retrofit	Energy-efficient upgrades for condos, townhomes and managed properties	11,026	2024-25	All counties
Multifamily New Construction	Lower the cost of incorporating energy-efficient systems and equipment into your design	8,015	2024-25	All counties
Small Business Direct Install	Help conduct energy-efficiency surveys and ***install free or low-cost solutions***	26,000	2024-25	All counties

* Excludes Northwest Energy Efficiency Alliance or Schedule 258 programs

** The full program list will be included in the 2024-25 Biennial Conservation Plan on November 1, 2023

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Specific actions – demand response

Demand response (DR) is a measure for reducing energy load in response to supply constraints, generally during periods of peak demand to manage and maintain system reliability

Program/Product	Description	Program Launch	Counties
Flex Rewards	Customers receive rewards for ***shifting their behavior*** to reduce their energy usage.	Winter 2023	Territory wide
Flex Smart	Customers receive rewards for ***enrolling smart devices*** in automatic energy reduction - such as smart thermostats, water heater, and EV	Summer 2023	Territory wide
Flex Events	Customers notified and given tips on how to ***shift their behavior*** and reduce their energy usage.	Summer 2023	Territory wide
Flex Rewards – Business Demand Response	Businesses receive rewards for participating in ***personalized energy reduction plan***	Winter 2023	Territory wide

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Specific actions – distributed energy resources (storage)

DER storage includes programs and products that provide localized energy storage within PSE's service territory to enable direct customer interaction with renewable energy and use to meet system needs

Program/Product	Description	Capacity (2025)	Year(s)	Counties
Distributed Storage Projects	Standalone storage projects (batteries), ranging from 1 – 5 MWs, that ***store energy*** for use ***during peak times*** to increase reliability	33.5 MWs	2025	Pierce, Thurston, Skagit, King, Whatcom
Customer Voluntary Products/Programs	PSE offers an ***incentives on battery energy storage systems*** will help remove the high upfront cost of installing a battery and further increase access to battery ownership	5 MW	2025	Throughout PSE's service territory

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Specific actions – distributed energy resources (solar)

DER solar includes programs and products that provide localized solar generation within PSE's service territory to enable direct customer interaction with renewable energy

Program/Product	Description	Capacity (2025)	Year(s)	Number of projects	Counties
Community Solar and Income Eligible Community Solar	Offers electric customers the opportunity to choose ***100% locally generated*** solar energy by subscribing to shares	50 MW (increased from 30 MW in 2021 CEIP)	2023-25	~25	Kittitas, Thurston, King, Pierce, Whatcom, Skagit
Green power solar grants	Annual grants that ***fund solar projects*** at nonprofits, public housing authorities and Tribal entities serving low-income and/or BIPOC community members	1.5 MW	2023-25	20 - 30	All
Net metering	PSE tracks energy used and the amount of ***excess power*** a customer's solar system generates; renewable energy sent back to the grid is ***credited to PSE account***	59 MW	2024-25	5,500-7,000	All
Distributed generation	Developer and PSE owned projects in the range of 200 kW – 5 MWs. Projects include solar, storage and hybrid (solar + storage)	Solar: 9 MWs; Hybrid: 8.9 MWs solar	2025	10-15	Whatcom, Skagit, South King, Pierce, Thurston, Kitsap
Solar Purchase Rate	Aims to grow new ***customer owned distributed solar capacity***. The program contains Equity-Focused design elements to address barriers identified through community engagement	13.6 MW	various	30-60	Any
Residential Rent-to-Own	PSE developing ***rent-to-own options*** for both residential rooftop solar and residential battery for Named Communities and other residential customers	2 MW	various	TBD	various

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Other specific actions

- Time varying rates pilot (2023) ~ 7,500 customers (2,500 in Named Communities)
- Grid modernization to enhance resiliency and enable DERs and microgrids
- Virtual power plant to enable, control and monitor distributed energy resources (ex. Thermostats, water heaters, etc.) in an efficient manner

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Utility scale resource acquisition (2022-2025)

PSE continues to evaluate projects and pursue opportunities to achieve our clean energy goals in this CEIP period and beyond

2022	2023	2024	2025
• **250 MW** CETA eligible short-term transaction(s)	• **350 MW** Clearwater wind project in Montana • **500 MW** CETA-eligible short-term transaction(s)	• **265 MW** CETA-eligible short-term transaction(s)	• **90 MW** Vantage wind project in Eastern WA • **248 MW** Beaver Creek wind project in Stillwater County, MT*

* Beaver Creek was not included in the 2023 Biennial CEIP Update as the agreement was completed in December 2023. The expected COD date is Q4 of 2025.

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