2025 Clean Energy Implementation Plan

2026-2030

Snohomish PUD

December 2025

Contents

Acknowledgements

The Clean Energy Implementation Plan development process brought together staff from across the District to determine how to continue engaging our customers, and how to build upon the foundation set by the PUD's first CEIP.

Thanks to the following PUD staff members for contributing their efforts to the 2025 CEIP

Jeff Feinberg, Energy Services	Lisa Hunnewell, Corporate Communications
Michael Coe, Energy Services	Taylor Ostrander, Business Readiness
Brenda White, Government Relations	Kris Scudder, Power Supply
Peter Dauenhauer, Rates	Ian Hunter, Power Supply
Garrison Marr, Power Supply	Jason Zyskowski, Chief Energy Resources Officer
Landon Snyder, Power Supply	Aaron Swaney, Corporate Communications
Shelley Pattison, Energy Services	Laura Reinitz, System Planning
Kenny Nichol, Power Supply	Kellie Stickney, Corporate Communications
Sophia Hitsky, Corporate Communications	Jazmin Garcia, Corporate Communications
Nick Peretti, Energy Storage and Emerging Technologies	Christina Leinneweber, Rates
Melissa Wilch, Energy Services	Jackie Morales, Customer Experience
Felicienne Ng, Rates	Laura Zorick, Corporate Communications

Section 1 - Executive Summary

Utility planning is a process that considers how a given utility will provide safe and reliable electric service to its customers at the lowest reasonable cost while adhering to the policy requirements of electric utilities. While the Public Utility District #1 of Snohomish County (PUD) engages in a comprehensive Integrated Resource Planning process to evaluate future needs and select appropriate resources to meet those needs, this Clean Energy Implementation Plan (CEIP) specifically examines how the PUD plans to meet the policy and regulatory objectives of the Clean Energy Transformation Act (CETA).

While the PUD's 2025 IRP establishes its Long-Term Resource Strategy, the CEIP is intended to provide a shorter-term look at targets and goals that will demonstrate the PUD's continued commitment to clean energy and satisfy the statutory requirements of CETA. The CEIP will achieve this by establishing realistic targets for clean energy use, examining specific actions recommended by the IRP, and engaging the PUD's customers for their thoughts and feedback.

Key Features of the CEIP

1. Establish interim targets for clean energy usage

2. Examine to-date progress on previous interim targets

3. Utilize all existing and validated analysis from the PUD's 2025 IRP in establishing specific targets for energy efficiency, demand response, and renewable energy

4. Identify and investigate actions specified in the 2025 IRP's Long Term Resource Plan for their applicability to CETA compliance

5. Consider highly impacted communities and vulnerable populations, and the impact the PUD's actions may have upon those customer groups

6. Meaningfully engage with the PUD's customers to gather feedback and perspectives on the PUD's clean energy future
7. Describe how the PUD expects to continue planning for CETA compliance in the future, and what to expect from future engagements

Establishing Targets

The PUD's 2025 IRP examines the needs and resources that the PUD should consider as it moves through its planning horizon. As the PUD changes the product it purchases from the Bonneville Power Administration to Load Following, the IRP assumes all PUD net load will be served by this new product and the PUD's dedicated resources which include the Jackson, Youngs Creek and Packwood hydropower facilities. This results in a clean energy outcome for Snohomish that looks largely similar to BPA's resource portfolio composition, though slightly cleaner. BPA reports a fuel mix that is, on average, approximately 92% clean, which Snohomish utilizes to characterize BPA's fuel mix, alongside the PUD's dedicated hydro facilities to inform our interim target.

When considering specific targets for energy efficiency and demand response, the PUD conducted a Conservation Potential Assessment. From this assessment, the PUD established energy efficiency targets for the Energy Independence Act. The PUD also conducted a Demand Response Potential Assessment, which informed the 2025 IRP on the availability and viability of utility scale demand response. The CEIP draws from each of these assessments not only to establish the specific targets required by statute, but to maintain consistency across PUD planning efforts and regulatory filings. **The 2026-2029 CEIP establishes an energy efficiency target of 17.0 annual average megawatts (aMW) at busbar, and a peak hour reduction demand response target of 26.6 MW.**

Specific Actions to be Taken by the PUD

Once again leveraging the analysis performed as part of the PUD's 2025 IRP, the CEIP identifies two specific actions to be considered in the 2026-2029 timeframe**: acquiring conservation and demand response.** These actions have been selected as the lowest reasonable cost methods of meeting the PUD's forecasted needs within the next four years, while maintaining reliability,

safety, and environmental standards. The CEIP must consider the potential impacts of these specific actions.

Public Process

In order to identify vulnerable populations and potential impacts of planned specific actions, the PUD engaged the public for its feedback. In an effort to collect meaningful input, **the PUD's 2025 CEIP public process included public meetings both at the PUD Headquarters and at a variety of public locations intended to meet our customers in their communities.** This engagement was in concert with the public process held for the IRP, which encompassed an **eight-month engagement with local businesses and community groups.** In the future, the PUD plans to continue its robust public engagement with a diversity of in-person and virtual meetings to cover a broad cross-section of customer types and to positively iterate making each engagement process better than before.

Evaluating the Impact of the PUD's Specific Actions

Evaluating the impacts of specific actions (acquiring conservation, demand response, and energy storage) requires the **identification of impacted communities** and the **development of metrics used to evaluate the impact of actions**.

CETA statute identifies two classifications of impacted communities: "highly impacted communities" and "vulnerable populations" that may be impacted. The CEIP utilized the Washington Department of Health's Cumulative Impact map to identify highly impacted communities as required by statute[1], which can be found in Appendix B. The PUD is also continuing to monitor the two categories of vulnerable populations developed in the 2022-2025 CEIP study period, reflective of feedback from that public engagement process and from feedback in our most recent public engagement.

[1] As defined in RCW 19.405.020(23)

These vulnerable populations are listed below and described in more detail in Section 5:

1. Customers that have a high energy burden of at least 7% and,
2. Customers living in distribution system constrained area

The metrics identified as appropriate to measure the impacts of actions in these communities are listed below and described in more detail in Section 6:

1. Conservation program participation of high energy cost burden customers and,
2. Forecasted distribution constraint relief from resource acquisition in distribution constrained areas

Resource Adequacy

As a utility that operates within the Bonneville Power Administration's Balancing Authority (BPA BA), the PUD has a different set of considerations for resource adequacy than other utilities that manage their own BA.

Because the PUD has opted to become a Load Following customer of BPA, the PUD does not have the same Resource Adequacy requirements as identified in our previous CEIP. The PUD now fully utilizes BPA to provide and guarantee its Resource Adequacy. Enabling BPA to provide the PUDs Resource Adequacy requirements alleviates significant portfolio pressure from the PUD and enables examination of clean resource combinations not previously possible. For the purpose of this CEIP, the PUD considers compliance with Western Resource Adequacy Program for the PUD's load and resources to be the resource adequacy standard. This is being accomplished on the PUD's behalf by BPA's compliance with WRAP standards for the PUD's loads and resources.

Continuing Commitment to Clean Energy

The PUD's Board of Commissioners has a long-standing policy to meet all future load growth through a combination of cost-effective conservation and non-emitting resources. The 2025 IRP establishes a Long-Term Resource Strategy that is consistent with this vision, and the CEIP team will continue to examine the PUD's expected actions and resource developments to ensure that

the PUD is progressing toward the 2030 and 2045 clean energy standards while equitably distributing the energy and non-energy benefits of its actions.

Because the PUD views the commitment to the transition to clean energy as ongoing, the CEIP reinforces the findings in the IRP and helps lay the foundation for how **the PUD seeks to continue its commitment to non-emitting resources in its power supply portfolio and meet customer needs with clean, affordable, and reliable electricity.**

Section 2 - Identifying Targets

The process of identifying targets in the interim compliance period (2026-2029) accomplishes two tasks set forth in statute: 1) identifying specific targets for new resource additions consistent with the IRP and Clean Energy Action Plan, and 2) identifying those resources which will serve retail load consistent with the existing portfolio, resource additions called for in the IRP and Clean Energy Action Plan, and categorized as renewable resources or non-emitting resources in the Clean Energy Transformation Act statute.

Specific Targets by Resource Type

The CEIP must establish specific targets for (a) Energy Efficiency (as expressed in MWh of first-year savings), (b) demand response (in peak hour MW), and (c) Renewable energy (in MWh)[2]. The 2025 IRP identifies two such planned investments in its long-term resource plan relevant to the four-year interim compliance period of 2026 - 2029. These targets are expressed in Figure 2-A as they are likely to appear in the 2025 IRP. These resources are cumulative in nature, such that that the 2029 figure expressed is the result of all such cumulative achievements by December 31, 2029 of the compliance period.

Figure 2-A: Specific Targets by Resource Type (Cumulative)

	2029 (4-year)
Conservation (Cumulative annual aMW)	17.0
Demand Response (Cumulative peak hour MW)	26.6

Figure 2-B is reproduced in the units called for in the units specified under the applicable administrative code in figure 2-B below.

[2] WAC 194-40-200 (3)

Figure 2-B: Specific Targets by Resource Type (Cumulative)

	2029 (4-year)
Conservation (Cumulative annual MWh)	148,920
Demand Response (Cumulative Peak Hour MW)	26.6

Interim Targets for the Compliance Period

The PUD's switch to Load Following marks a significant operational departure from its historic method of serving its customer load. Previously, the PUD purchased the Block/Slice product from BPA which delivered a fixed amount of power plus a variable amount of power determined by the generating capability of the federal system. This allowed the PUD to manage its own load needs and to utilize surplus clean energy for the benefit of its customers. Further, it supplied clean energy in excess of the 8% unspecified power in BPA's fuel mix allowing the PUD to target 100% clean as our 2022-2025 interim target.

The PUD is proud to confirm that under current CETA reporting standards and utilizing the Block/Slice product, it met its 100% clean target for 2022-2025.

However, the Block/Slice product also exposed the PUD's customers to significant costs related to market price excursions and Resource Adequacy determinations. After significant analysis and public process, the PUD elected to become Load Following customers of BPA which significantly reduced both actual costs and risk for our ratepayers. This change resulted in a roughly $40M cost savings in 2026 relative to the 2025 PUD Power Supply budget - a savings that benefits all PUD ratepayers. This action did, however, change the way that we are able to account for BPA power in our portfolio. We no longer receive "surplus" BPA – instead BPA delivers power to us 1:1 with our load needs, after applying certain PUD-owned resources. As such, BPA's fuel mix is by and large our fuel mix; historically, approximately 92% clean on average.

Figures 2-E and 2-F present data targets in the format specified in statute. Here renewable energy includes all renewable energy (including the PUD's share of BPA Power using the methodology outlined in Section 5 of the 2025 IRP) and non-emitting resources (using the same methodology specified in Section 5 of the 2025 IRP). These targets are provided on a forecast basis, using an assumption of normal (or P50) weather as it affects load and hydropower generation.

Figure 2-E: Interim Targets for the Compliance Period, MWh

	2026	2027	2028	2029
Renewable Energy	5,661,451	5,741,107	5,843,682	5,900,109
Non-Emitting Energy	732,159	742,977	755,896	761,244
Total Renewable and Non-Emitting Resources	6,393,611	6,484,083	6,599,578	6,661,353
Retail Load Forecast	6,926,090	7,024,430	7,149,321	7,274,639

Figure 2-F: Interim Targets for the Compliance Period, Percentage

	2026	2027	2028	2029
Renewable Energy	82%	82%	82%	81%
Non-Emitting Energy	11%	11%	11%	10%
Percentage of Retail Load Served by Renewable or Non-Emitting Resources	93%	93%	93%	91%

Section 3 - Specifying Actions

A Clean Energy Implementation Plan must demonstrate the specific actions a utility plans to take to comply with CETA requirements and describe how specific actions are consistent with IRP and the Clean Energy Action Plan. The specific actions planned are derived directly from the 2025 IRP and its sub-component Clean Energy Action Plan and are the planned resource additions to meet the PUD's defined goals. The CEIP identifies two specific actions to be considered in the 2026-2027 timeframe for the purposes of the CEIP: acquiring conservation and demand response.

The first identified action **is continuing the PUD's investment in and commitment to energy efficiency and conservation.** Conservation represents the foundation for the PUD's resource plan by providing multiple value streams for meeting the PUD's future needs; by reducing future needs, conservation presents itself as a viable and cost-effective alternative to expensive resource acquisitions. Further, the capacity benefit provided by its reduction during peak hours helps manage potential capacity costs of BPA Power and Transmission products. While the PUD has a robust conservation portfolio already established, the CEIP hopes to explore its accessibility to all customers, and how the PUD can improve and increase conservation portfolio availability to vulnerable populations throughout Snohomish County.

The second identified action is continuing development of local demand response and smart rate programs with our customers. Demand response represents a cost-effective capacity addition to help the PUD meet capacity needs and reduce supply-side capacity resource acquisitions. While the PUD has pilot demand response programs established, the CEIP hopes to continue exploring its accessibility to all customers, and determining how the PUD can improve and increase demand response program availability to Snohomish County. Development of demand response programs will be interdependent on the development and rollout of the PUD's Advanced Meter Infrastructure (AMI) project.

Figure 3-A provides the scale and type of planned actions, expected by 2025.

Figure 3-A: Specific Resource Additions over Compliance Period by Resource Type (Cumulative)

	2029 (4-year)
Conservation (Cumulative annual aMW)	17.0
Demand Response (Cumulative peak hour MW)	26.6

Section 4 - Engaging the Public

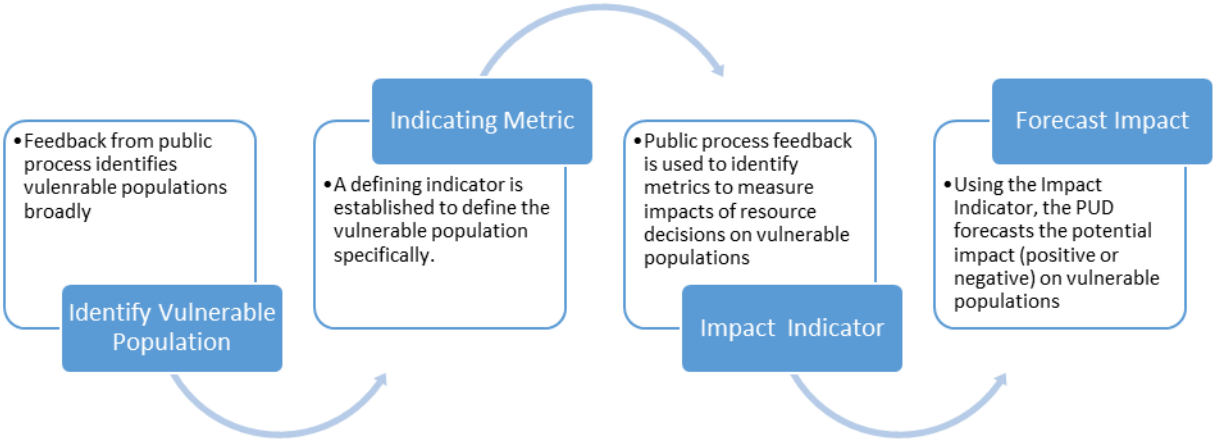
As a publicly owned utility, the PUD believes that its customers voices are critical to our mission of serving Snohomish County with safe, reliable, and environmentally responsible power at the lowest reasonable cost. Under PUD organizing statutes, our regulatory body is made up of three elected PUD Commissioners who serve as the decision-making foundation upon which the PUD operates. While this CEIP will be discussed and considered in open public Commission meetings, it was the goal of the CEIP team to perform additional targeted outreach to our customers.

The PUD began its public outreach for the 2025 CEIP with acknowledgements that the 2021 CEIP intended to expand the public process the 2020 pandemic subsided. The PUD's 2021 and 2023 IRP public process proved successful, and these efforts helped develop the public engagement process for the 2025 IRP and 2025 CEIP's. Future CEIPs will continue to build on successes in the 2025 outreach and include a more expansive, community-based, more inclusive public process, and the PUD looks forward to setting a high standard for utility customer engagement.

The primary purpose of the public processes was to receive feedback and input to inform an identification of vulnerable populations as defined under the statute, and to explore meaningful metrics that may measure how planned actions may impact community groups. The PUD also engaged the public in their perception of planned actions listening for public feedback on how actions could best meet community needs. The PUD's Board of Commissioners is also a critical component of the public process by virtue of their policy leadership on the 2025 IRP for which the CEIP relies, the feedback they provide during IRP briefing sessions, and through the public comment processes that Commission briefings provide.

The interrelationship of vulnerable population identification, measurement, and forecast impacts is described in Figure 4-A below:

Figure 4-A: Public Process and Development of Vulnerable Population, Indicator and Forecast Impact Relationships



For the 2026-2029 CEIP, the public engagement strategy consisted of four parts:

- A community-leaders forum,
- Four open house events to gather feedback
    - Two traditional open house events incorporating IRP and CEIP feedback,
    - Two community-based events utilizing an inclusive, gamified feedback process,
- A virtual open house offering via the PUD's PowerTalks series, and;
- Commission Meeting Briefings and Public Comment periods on planned CEIP efforts

A summary of the high-level themes across public processes is as follows:

- Customers supported continuing to prioritize the vulnerable populations identified in the PUD's 2021 Clean Energy Implementation Plan (CEIP). These groups were previously defined as "distribution-constrained customers" and "energy-burdened customers." Customers unanimously agreed that these definitions remain relevant, and maintaining consistency allows for tracking impacts over time.
- PUD customers understand the importance of reliability as it relates to their ability to maintain a high quality-of-life at home, in their workplace, the reliability of the businesses they frequent, and increasingly, as they work from home. In this context, customers want PUD resource plans that consider reliability for the community as a whole and in the neighborhoods where they live, work and play. This includes adequately

planning for the potential of future innovation, such as electric vehicles and rooftop solar growth.

- The PUD should ensure any programs to support distribution constrained customers account for non-homeowners. Although the vulnerable population was appropriately broadly defined an emphasis was noted for renters or other living situations and services and programs should account for some customers inability to participate.
- Future PUD public processes should continue to expand offerings with an emphasis on connecting with community groups, finding ways to connect with customers that may not speak English as a first language, and providing venues for discussion or learning to customers where those communities are, and providing venues for discussion to community members without regular access to computers or the internet.

The feedback received thus far has been valuable and has been accounted for when considering the specific actions identified in this CEIP.

Community Leaders Forum

A community leaders forum was held at the PUD headquarters in Everett, WA on May 23, 2024 inviting service organizations, local business leaders and governmental planning teams. This forum represented a wide cross section of the county customer base and insight into challenges faced by customers. Service organizations were invited to present the challenges faced by low-income customers and gave feedback on the PUD planning process and resource decisions. Feedback received during the community leaders forum supported both vulnerable population choices with the high cost of energy investments and upgrades were identified as a significant challenge across sectors and reliable energy were the highest priorities for our customers.

Open Houses

The PUD conducted four public engagement events as part of its outreach efforts: two traditional-format open houses and two interactive, gamified community events. The open houses were held at the Everett Headquarters and the Arlington Clean Energy Center, while the community events took place at Cedar Valley Community School and a senior center in

Snohomish County. The PUD recognizes the importance of inclusivity of our diverse community and included support for Spanish speaking households at our community open houses. Future community outreach will incorporate feedback received from the community on the importance of continuing to engage the diverse community the PUD serves.

In total, nearly 100 community members participated, engaging directly with the Integrated Resource Plan (IRP) team to share their insights on the PUD's resource planning process and the Clean Energy Implementation Plan (CEIP). Feedback across all events consistently supported maintaining the current definition of vulnerable populations, with additional consideration for non-homeowners through programmatic approaches.

Participants identified renewable energy and affordable electricity as their highest priorities, closely followed by reliable service. These community-identified priorities are reflected in the criteria used to define vulnerable populations within the planning framework.

Section 5 - Identifying Highly Impacted and Vulnerable Communities

CETA statute asks utilities to identify both Highly Impacted communities, using a set methodology, and Vulnerable Populations using a public process.

Identifying Highly Impacted Communities

The PUD follows the Washington State Department of Commerce guidance on identifying Highly Impacted Communities provided in their CEIP reporting template. In general, that guidance identifies census tracts with "cumulative environmental health disparities" index values of 9 or above (as determined by the Washington state Department of Health), or census tracts containing Tribal Lands as highly impacted communities for consideration in CEIP documents. These identified Census tracts are provided in Appendix B and contain a total of 29 Census Tracts. Ten (10) of these Census tracts were identified because their disparity index value was greater than 9, and nineteen (19) were identified because they contained Tribal Lands.

Identifying Vulnerable Communities

Through the public engagement processes, the PUD distilled feedback to identify vulnerable populations related to the provision of electricity service that the PUD could meaningfully impact through resource acquisition actions.

Energy-Cost-Burdened Customers

The PUD is sensitive to the needs of its community and the economic pressures they face. While the PUD offers assistance programs for those customers who are income-qualified, there may be other customers who face a high energy burden but whose income is above the threshold required to qualify for the current assistance program. Public feedback directly refenced a public interest in an expansive consideration of customers who may have a harder time paying their bills. **To define this vulnerable population, the PUD has used an indicator on high energy cost burden, which defines a customer as having a high energy burden if their energy costs are 7% or more of their income.**

One community that we are actively monitoring are those energy-cost-burdened customers who rent rather than own their homes. This sub-population may have different challenges related to energy burden that we want to better understand. We have not identified this group as a stand-alone Vulnerable Population yet but will consider this action in the next CEIP cycle based on our observations during the 2026 – 2029 period.

Customers Living in Distribution System Constrained Areas

As the PUD reviews its distribution system, there are areas in Snohomish County that are quickly growing. This growth is just one factor that could contribute to the distribution system in a particular geographic region becoming constrained. While existing customers may not see a reduction to reliability, increased usage of the existing system could produce future constraint. In addition, distribution constrained systems are at increased risk of reliability interruptions due to increasingly frequent extreme weather events.

During the public feedback process, service reliability and pro-actively planning for future customer load, especially for those in parts of the service territory that may be more vulnerable to service interruptions was discussed. The public feedback sessions indicated a desire for consideration of non-homeowners in the design of programs. The PUD proposes to maintain its second vulnerable population of "customers living in a distribution system constrained area" to continue proactively assessing the potential benefits of resource additions in these areas. Consideration of this vulnerable population model could help inform future decisions about where resources might be sited in Snohomish County to maximize the benefit not only for the PUD's portfolio, but also for those customers whose local distribution system may need reinforcement.

To define this population, the PUD has used as an indicator those customers who are on Distribution System Circuits that have limited capacity on the primary line serving the circuit.

Section 6 - Assessing Impacts of Specific Actions on Identified Communities

Assessing the impacts of specific actions requires a layered look in the context of CEIP regulatory obligations. Utilities must provide an expectation of the energy or nonenergy benefits and costs, provide an expectation of expected effects of specific actions, and a description of how the utility intends to reduce risk to vulnerable populations in the Clean Energy transition.

In many respects, the PUD's Clean Energy Implementation Plan can be characterized as a conveyance of benefits to identified communities, rather than a distribution of costs or harms. This is because the largest investments in the CEIP are conservation and demand response measures that seek to lower energy consumption, bills, and distribution system strain for customers across the service territory. In addition, because this is the lowest cost way for the PUD to meet its portfolio needs, it is expected that this course of action will result in the lowest costs to customers in identified communities.

Expected Energy and Nonenergy Benefits and Costs

Because conservation is the single most cost-effective resource that can be acquired, the PUD prioritized conservation as a starting point for the measurement of energy and non-energy benefits as it represents the largest investment by scale. The PUD will continue analysis throughout the interim compliance period. In addition, it is worth noting that because the planned actions are the result of a lowest reasonable cost plan analysis, the actions anticipated are expected to result in the lowest cost to all customers, including those in Highly Impacted Communities and among Vulnerable Populations.

Expected Energy Benefits

Expected energy benefits of conservation were developed using a geospatial analysis tool the PUD developed as part of the Conservation Potential Assessment process. This tool allows the PUD to model the cost-effective conservation geospatially to see what cost-effective conservation potential there may be in Highly Impacted Communities and Vulnerable Populations that are mappable.

It is expected that 19.14% of the cumulative cost-effective conservation and cumulative demand response planned by 2029 will be located in Highly Impacted Communities. Additional information is provided in Appendix C.

Staff estimates that 19.47% of the cumulative conservation and cumulative demand response planned by 2029 will be located in areas with Distribution System constraints. Additional information on this breakdown is provided in Appendix D.

Expected Non-Energy Benefits

Non-energy benefits are an included component of the Conservation Potential Assessment are included as a financial consideration in the CPA methodology. To estimate the non-energy benefits of conservation in Highly Impacted Communities and Vulnerable Populations, the total non-energy benefit total for cost-effective conservation measures was calculated and applied to the proportion of cost-effective energy found for the applicable identified communities in terms of expected energy benefits. The total non-energy benefits for cost-effective conservation to be achieved by 2029 is estimated at $6.7 million in net present value lifetime savings, with all of it in the residential sector. The estimated non-energy benefits within Highly Impacted Communities is estimated at $1.28 million in lifetime savings expressed in net present value terms. The estimated nonenergy benefits within the Vulnerable Population of Distribution Constrained Areas is estimated at $1.3 million in lifetime savings expressed in net present value terms.

Other Energy and Nonenergy Benefit Considerations

The PUD also plans to develop demand response, including time-of-use rates within the interim compliance period. As development activities take further shape, PUD will be proactive in considering the impact of these activities on highly Impacted Communities and Vulnerable Populations and will seek to minimize harm and maximize benefits of actions, as appropriate, and on balance with other utility obligations.

Expected Effect of Specific Actions

The overall anticipated effect of the specific activities identified in the 2025 CEIP is that they will result in the lowest reasonable costs to PUD customers. However, it is also anticipated that the planned actions will produce additional benefits for Highly Impacted Communities and Vulnerable Populations.

Energy Bill Savings

It is expected that conservation and demand response will reduce the energy bills of customers that participate. As stated in the section above, it is anticipated that 19.14% of the energy bill savings from planned conservation actions will occur within Highly Impact Communities and 19.47% of the energy bill savings from planned conservation actions will occur within the Vulnerable Population of Customers in Distribution System Constrained Area.

Distribution System Relief

The PUD further expects that conservation savings will provide additional distribution system capacity in areas where there is little existing capacity on the circuit. Figure 5-A above provides a chart of the circuits with limited capacity. It is anticipated that planned conservation activities will add at least 3.31 aMW of additional capacity to these areas by 2029.

How the PUD Intends to Reduce Risks to Clean Energy Transition to Vulnerable Communities

The PUD's decision to change power products to Load Following is one of the primary strategies for protecting vulnerable communities moving forward. The product switch not only provides significant cost savings and rate shock mitigation for all PUD ratepayers but improves reliability and delivery certainty combined with the NT transmission product. Further, it frees up PUD resources to focus on projects that will benefit vulnerable populations as identified in the IRP's Action Plan including demand response and locally sited solar that provide system benefits and regulatory value.

Section 7 - Ensuring Resource Adequacy

The Clean Energy Transformation Act requires utilities to make "a determination of resource adequacy metrics for the resource plan…"[3]. The PUD is in a unique situation to do so because of its relationship to BPA and the BPA Power and Transmission products that the PUD is procuring. The PUD elected to change to the BPA Load-Following product on October 1, 2025, in part because of analysis showing it would help cost-effectively meet regional resource adequacy program requirements. The BPA Load-Following product is considered to be full-requirement load service, whereby BPA provides all power needed for load service after dedicated utility-owned resources are brought to load. BPA has also joined the Western Resource Adequacy Program, and its load service obligations (inclusive of the PUD) are covered by that program. As a result, the PUD considers the Western Resource Adequacy Program (WRAP) to be the appropriate current measure, and the PUD is meeting WRAP program requirements by virtue of taking a WRAP-compliant BPA Power product.

The Western Resource Adequacy Program

The Western Resource Adequacy Program (WRAP) is a voluntary program established in 2019 in which participating utilities in the western region engage in reliability planning and resource sharing to reach regional capacity compliance, helping utilities to meet resource adequacy needs at the lowest cost. In the late 2010s, studies from several organizations concluded that the western region may reach serious capacity shortages by the mid-2020s, which would critically impact regional reliability.[4][5] WRAP was created in response to these concerns, helping participants to maintain reliability in a range of conditions, which is especially important during

[3] RCW Chapter 19.285.030 (1)(g). https://app.leg.wa.gov/RCW/default.aspx?cite=19.280.030

[4] Gangelhoff, G. (2020, June 16). *E3 projects Substantial capacity shortfall in the Pacific Northwest - E3*. E3. https://www.ethree.com/e3-projects-substantial-capacity-shortfall-in-the-pacific-northwest/

[5] PNUCC System Planning Committee. (2019). *Northwest Regional Forecast of Power Loads and Resources 2020 through 2029*. https://www.pnucc.org/wp-content/uploads/PNUCC-2019-NRF.pdf

this current period of transition as coal-fired plants are retiring and reliance on variable renewable resources increases.[6]

The primary components of WRAP are forward-showing and an operational program. In forward-showing, participants demonstrate that they have sufficient regional capacity secured around 7 months in advance. An operational program provides short-term forecasts, and if a participant is projected to have a capacity deficit they will be supplied with resources from those with a surplus. The program is still in the late stages of its full development and not yet fully binding, expecting to be a fully binding program by 2028.

[6] Energy & Environmental Economics (E3). (2019). Exploring a resource adequacy program for the Pacific Northwest. In *An Energy System in Transition* [Report]. https://www.westernpowerpool.org/private-media/documents/2019.11.12_NWPP_RA_Assessment_Review_Final_10-23.2019.pdf

Section 8 - Looking to the Future

The PUD is committed to a clean energy future and is well-positioned to meet compliance standards under the new CETA provisions. While this CEIP continues to build upon the foundation set by the 2021 CEIP, the PUD recognizes areas to focus on for further development in the next CEIP and throughout the interim compliance period of 2026-2029.

Continuing to Develop Robust Public Processes

The PUD has embraced the public process components of the CEIP and has been making a concerted effort to build increasingly robust public engagement processes each IRP cycle. 2023 IRP Update public processes included more public open house opportunities than the 2021 IRP, and the 2025 IRP had more than the 2023 IRP. In addition, the 2025 IRP held Open Houses at different locations across the service territory, included language services for potential participants who did not speak English as a first language, and included outreach to seniors, in an effort to capture a broad spectrum of customer perspectives. Future public processes will meet our internal expectation of exceeding customer's expectations, taking a customer-centric approach to service provision, and building on previous efforts.

Indicator Development

The PUD intends to continue to develop indicators that capture how planned actions impact identified communities as additional CEIP's are developed, in consultation with internal subject matter experts and input from the public. It is the PUD's intention to develop indicators, avoid negative impacts, and drive towards positive benefits throughout the interim compliance period.

Appendix A.

This section intentionally left blank.

Appendix B. List of Identified Highly Impacted Communities in Snohomish County

The PUD follows the Washington State Department of Commerce guidance on identifying Highly Impacted Communities provided in their CEIP reporting template. This guidance instructs utilities to reference Department of Health data on census tracts with an Environmental Health Disparities index score of 9 or 10 (out of a range of 1 to 10) and census tracts that contain tribal lands.

This dataset can be found online at the Department of Health's website[7]:

Census Tract	County Name	Highly Impacted Community (Yes/No)	Tribal Lands (Yes/No)	Environmental Health Disparities Topic Rank
53061053400	Snohomish	Yes	Yes	3
53061040100	Snohomish	Yes	Yes	8
53061040200	Snohomish	Yes	No	10
53061040700	Snohomish	Yes	No	9
53061040800	Snohomish	Yes	No	10
53061041100	Snohomish	Yes	No	9
53061041202	Snohomish	Yes	No	9
53061041806	Snohomish	Yes	No	10
53061041901	Snohomish	Yes	No	9
53061041904	Snohomish	Yes	No	10
53061051701	Snohomish	Yes	No	9
53061051803	Snohomish	Yes	No	9
53061052104	Snohomish	Yes	Yes	7
53061052803	Snohomish	Yes	Yes	5
53061052804	Snohomish	Yes	Yes	5
53061052805	Snohomish	Yes	Yes	7
53061052903	Snohomish	Yes	Yes	8
53061052904	Snohomish	Yes	Yes	8

[7] https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/ClimateProjections/CleanEnergyTransformationAct/CETAUtilityInstructions

53061052905	Snohomish	Yes	Yes	8
53061053102	Snohomish	Yes	Yes	4
53061053202	Snohomish	Yes	Yes	1
53061053301	Snohomish	Yes	Yes	1
53061053302	Snohomish	Yes	Yes	3
53061053508	Snohomish	Yes	Yes	6
53061053700	Snohomish	Yes	Yes	5
53061940001	Snohomish	Yes	Yes	7
53061940002	Snohomish	Yes	Yes	5
53057951100	Skagit	Yes	Yes	2
53029971700	Island	Yes	Yes	1

Appendix C. Expected Energy Benefits in Highly Impacted Communities

Census Tract	County Name	Cumulative 2029 EE (aMW)	Cumulative 2029 DR (PH MW)
53061053400	Snohomish	0.14	0.31
53061040100	Snohomish	0.33	0.27
53061040200	Snohomish	0.23	0.18
53061040700	Snohomish	0.27	0.26
53061040800	Snohomish	0.18	0.14
53061041100	Snohomish	0.15	0.21
53061041202	Snohomish	0.11	0.19
53061041806	Snohomish	0.07	0.20
53061041901	Snohomish	0.30	0.24
53061041904	Snohomish	0.08	0.13
53061051701	Snohomish	0.13	0.20
53061051803	Snohomish	0.06	0.15
53061052104	Snohomish	0.10	0.12
53061052803	Snohomish	0.35	0.36
53061052804	Snohomish	0.13	0.26
53061052805	Snohomish	0.12	0.19
53061052903	Snohomish	0.15	0.20
53061052904	Snohomish	0.06	0.18
53061052905	Snohomish	0.08	0.17
53061053102	Snohomish	0.13	0.26
53061053202	Snohomish	0.07	0.22
53061053301	Snohomish	0.17	0.25
53061053302	Snohomish	0.11	0.31
53061053508	Snohomish	0.08	0.11
53061053700	Snohomish	0.08	0.19
53061940001	Snohomish	0.36	0.44
53061940002	Snohomish	0.07	0.20
53057951100	Skagit	0.01	0.02
53029971700	Island	0.07	0.31
	System Total Cumulative 2029 Potential	**17.0 Annual aMW**	**26.6 PH[8] MW**

[8] Peak Hour

	Highly Impacted Community 2029 Potential	**4.20 Annual aMW**	**6.25 PH MW**
	Percent in Highly Impacted Communities	**24.71%**	**23.49%**

Appendix D. Expected Energy Benefits in Distribution Constrained Areas

Station	Circuit	Cumulative 2029 EE (aMW)[9]	Cumulative 2029 DR (PH MW)
BUNK FOSS	4113	0.04	0.06
CASCADE	2087	0.04	0.10
CASCADE	2088	0.04	0.11
CASCADE	2089	0.04	0.08
CASCADE	2090	0.05	0.09
CLEARVIEW	586	0.04	0.06
CLEARVIEW	587	0.05	0.13
EAST MARYSVILLE	38	0.04	0.10
EVERETT	101	0.03	0.03
EVERETT	112	0.07	0.11
EVERETT	3702	0.01	0.01
FRONTIER	534	0.07	0.11
FRONTIER	535	0.06	0.14
FRONTIER	536	0.07	0.11
GIBSON	2897	0.05	0.14
GOLDBAR	554	0.10	0.22
GOLDBAR	555	0.03	0.07
GRANITE FALLS	4614	0.02	0.02
GRANITE FALLS	4615	0.04	0.13
GRANITE FALLS	810	0.04	0.12
GRANITE FALLS	811	0.03	0.07
HARBOUR POINTE	4676	-	-
HARDESON	4556	0.00	0.00
HARTFORD	3117	0.03	0.10
HARTFORD	3119	0.03	0.09
HARTFORD	3120	0.05	0.14
HILTON LAKE	497	0.03	0.08
HILTON LAKE	498	0.01	0.05
LAKE SERENE	339	0.05	0.08
LAKE STEVENS	124	0.05	0.14

[9] Some circuits in this table do not have EE or DR values because those circuits do not normally carry customers or do not have installed meters.

LAKE STEVENS	125	0.05	0.14
LAKE STEVENS	273	0.02	0.06
LAKE STEVENS	274	0.06	0.17
LAKE STEVENS	4034	-	-
NORTH CAMANO	315	0.01	0.05
NORTH CAMANO	316	0.03	0.14
NORTH CREEK	1413	0.05	0.08
NORTH MOUNTAIN	2514	0.06	0.15
NORTH MOUNTAIN	2515	0.02	0.05
NORTH MOUNTAIN	2516	0.18	0.04
PAINE FIELD	1729	0.06	0.07
PAINE FIELD	1730	0.04	0.06
PAINE FIELD	1731	0.03	0.08
PAINE FIELD	1732	0.12	0.03
PORT GARDNER	6022	-	-
PORT GARDNER	6023	-	-
PORTAGE	3502	0.07	0.05
SILVER LAKE	253	0.04	0.10
SKY VALLEY	6046	0.03	0.02
SKY VALLEY	6047	0.03	0.10
SKY VALLEY	6048	0.01	0.05
SMOKEY POINT	1509	0.05	0.11
SMOKEY POINT	1510	0.02	0.04
SNOHOMISH	123	0.06	0.10
SOUTH CAMANO	1530	0.02	0.07
SOUTH CAMANO	1531	0.01	0.05
SOUTH CAMANO	1532	0.04	0.17
SOUTH CAMANO	1533	0.03	0.11
SULTAN	1593	0.02	0.06
SULTAN	1595	0.06	0.14
SULTAN	5004	-	-
SUNSET	5208	0.03	0.14
SUNSET	5209	0.02	0.07
SUNSET	5210	0.02	0.06
SUNSET	5211	0.01	0.04
SUNSET	5212	0.03	0.10
TENTH STREET	327	-	-

THRASHERS CORNER	3304	-	-
THREE LAKES	1818	0.02	0.07
THREE LAKES	1819	0.04	0.13
THREE LAKES	1821	0.02	0.05
TURNERS CORNER	1429	0.01	0.03
TURNERS CORNER	1430	0.06	0.08
TURNERS CORNER	1431	0.04	0.05
TWIN CITY	6035	-	-
WALLACE RIVER	4485	0.02	0.05
WALLACE RIVER	4486	0.05	0.02
WALLACE RIVER	4487	0.04	0.11
WEST MONROE	3361	0.09	0.05
WEST MONROE	3362	0.09	0.08
WEST MONROE	3363	0.04	0.07
WEST MONROE	631	0.07	0.06
WEST MONROE	632	0.03	0.07
WEST MONROE	633	0.02	0.06
WOODS CREEK	1808	0.03	0.02
WOODS CREEK	1809	0.05	0.14
WOODS CREEK	1810	0.05	0.03
WOODS CREEK	1811	0.03	0.10
	System Total Cumulative 2029 Potential	**17.0 Annual aMW**	**26.6 PH[10] MW**
	Distribution Constrained Areas 2029 Potential	**3.36 Annual aMW**	**6.64 PH MW**
	Percent in Distribution Constrained Areas	**19.76%**	**24.96%**

[10] Peak Hour

Appendix E: Climate Commitment Act – Forecast of Loads and Resources

Overview

The PUD is utilizing Appendix E to identify the applicable and appropriate forecasts of loads and resources from the CEIP for use in calculating the PUD's cost burden. The PUD has included information in this Appendix E within the IRP and CEIP study periods for Emission Years not yet allocated by Ecology.

Because Snohomish has become a Load Following customer, Snohomish assumes that its only source of emissions will be from the Load Following product. Snohomish assumes that it will bring its dedicated resources to load at their critical values first (all non-emitting), with the remainder being served by BPA Load Following.

Forecast of Loads

For the Emission Years 2027 through 2029, the following total retail loads were forecast:

	2027	2028	2029
Total Retail Load (MWh)	7,024,430	7,149,321	7,274,639

Forecast of Bonneville Power Administration Electricity Received and Total Cost Burden

Because BPA is the only source of emissions in Snohomish's portfolio, we can directly assume that the cost burden of service will be derived directly from BPA deliveries. BPA's associated carbon content is forecasted based on BPA's most recent ACS value calculated with the California Air Resources Board[11].

	2027	2028	2029
BPA Energy Received (MWh)	6,754,333	6,871,782	6,920,400
BPA ACS Factor (MTCO2 / MWh)	.0452	.0452	.0452
Total BPA Emissions (MTCO2)	305,296	310,605	315,802

Administrative Cost Burden

Under the CCA final rule, utilities can receive allowances based on their administrative costs of "establishing and maintaining compliance accounts, tracking compliance, managing compliance instruments, and meeting the reporting and verification requirements of this chapter." The information required to calculate this administrative cost is not found in the CEIP and therefore is not included in this Appendix. The PUD anticipates Ecology to produce a high-level formula

[11] Mandatory GHG Reporting - Asset Controlling Supplier | California Air Resources Board

approach for determining Administrative Cost Burden that is not tied to specific utility expenditures.