PUGET SOUND ENERGY


# BIENNIAL CONSERVATION PLAN

2022-2023

ENERGY EFFICIENCY

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# Executive Summary

Consistent with RCW 19.285.040(1), WAC 480-109-120, and requirements outlined in Appendix A of the Commission Order 01 of Docket UE-190905, Puget Sound Energy (PSE, or the Company) presents this 2022-2023 Biennial Conservation Plan (the Plan or BCP). The Plan represents programs that PSE is putting into place in order to achieve PSE's Total Utility Conservation Goal indicated in part A.5 below.

## A. Approval of 2022-2023 Targets

Pursuant to WAC 480-109-120(1)(b)(i), the Company requests that the Commission allow the Plan to become effective on January 1, 2022, and approve:

1. PSE's 10-year Conservation Potential of 2,487,820 MWh, or 284 average megawatts (aMW).

2. PSE's EIA Target of 497,564 MWh, and the Natural gas CPA First Two Years of 9.26 million therms.

3. PSE's EIA Penalty Threshold of 469,182 MWh, or 53.6 aMW, and its Natural Gas Penalty Threshold of 9.26 million therms. The Penalty Threshold removes NEEA from the CPA-determined savings totals.

4. PSE's electric Decoupling Threshold of 24,878 MWh, and its natural gas Decoupling Threshold of 463,147 therms.

5. PSE's Total Utility Conservation Goal of 536,717 Megawatt-hours (MWh), or 61.3 average megawatts (aMW), and 9,791,327 therms.

Additional information outlining how PSE developed its 2022-2023 electric and natural gas targets and corresponding budgets can be found in Chapter 3: Regulatory and Compliance.

## B. Savings, Budgets, Cost-Effectiveness

Table 0-1 indicates PSE's overall Energy Efficiency Total Portfolio Electric and Natural Gas Conservation Goals, the anticipated spending for the Portfolio, and the Portfolio cost-effectiveness calculations. Unless otherwise noted, indicated figures represent all Sectors that comprise the Portfolio.

**Table 0-1: 2022-2023 Energy Efficiency Savings Targets, Budgets, and Cost-Effectiveness**

| | Total Savings | Budgets | EIA & Natural Gas Penalty Target | TRC B/C Ratio | Utility Cost B/C Ratio |
|---|---|---|---|---|---|
| **Electric** | 536,717 MWh | $240,105,807 | 469,182 MWh | 1.72 | 2.29 |
| | *61.3 aMW* | | *53.6 aMW* | | |
| **Natural Gas** | 9,791,327 therms | $48,523,531 | 9,262,931 therms | 1.33 | 1.62 |
| **Total Budget** | | $288,629,338 | | | |

PSE conducted an extensive examination of considerations in building the 2022-2023 conservation Portfolio. Planning teams scrutinized issues such as legislative impacts, marketplace dynamics, and externalities (for instance, utility actions and partnerships, regional initiatives, regulatory requirements). Staff comprehensively evaluated the potential for new offerings through its Request For Information (RFI) and Request For Proposals (RFP) processes, and internal resources affecting PSE's electric and natural gas savings targets.

In conjunction with its Conservation Resource Advisory Group (CRAG), PSE utilized its conservation potential assessment to build up its biennial targets. Detailed target setting can be found in Chapter 3: Regulatory and Compliance. Individual program savings and budgets are detailed in Exhibit 1: Savings Goals and Expenditures and roll up in the sector and portfolio tabs to create the two-year conservation portfolio goals.

To demonstrate cost-effectiveness of the portfolio, Exhibit 2: Cost-Effectiveness Estimates details each program in an individual tab with cost information and cost-effectiveness information for each individual measure. Program cost-effectiveness is then rolled up to the program level and aggregated at the portfolio level in the electric and natural gas tabs.

## C. Key Areas of Focus

The following list highlights key areas that Energy Efficiency considered while building the 2022-2023 portfolio and will continue to focus on throughout the biennium. These areas of focus help to exceed customer expectations, achieve savings goals, and ensure that PSE can sustain conservation efforts well into the future.

PSE discusses these key areas of focus in the following sections. Additionally, applicable program discussions elaborate on specific implementations for 2022-2023.

### 1. Increased Natural Gas Targets

PSE's natural gas target for the 2022-2023 biennium represents an increase of over 50 percent from the previous biennium targets. Program staff will achieve this dramatic increase in savings primarily through additional focus on PSE's Residential Space Heat programs, Home Energy Reports, and the Commercial/Industrial Retrofit programs.

### 2. Adapting to Regulations

#### *a. Clean Energy Transformation Act*

The Clean Energy Transformation Act (CETA) was signed into Washington State law in 2019 to achieve 100 percent clean energy by 2045. CETA rules require utilities to develop four-year Clean Energy Implementation Plans (CEIPs), the first of which was being developed alongside this Biennial Conservation Plan to be submitted in late 2021. PSE formed an Equity Advisory Group (EAG) to provide diverse perspective and engage with the communities in PSE's service area, including highly impacted communities and vulnerable populations (as defined by CETA).

Additionally, there are two requirements indicated in Section 12 that require Energy Efficiency action. Section 12(3) required the WA Department of Commerce (DOC) to collect and aggregate data relative to the energy burden and energy assistance need for each utility. PSE has coordinated with the DOC to provide many of the data points listed as deliverables within the section. Section 12(2) requires electric utilities to make programs and funding available for energy assistance to low-income households and prioritize low-income households with a high energy burden, pursuant to a biennial assessment, required in Section 14(4).

PSE continues to coordinate with the DOC and Department of Health to demonstrate progress as mandated by CETA. These efforts include ongoing engagement with customer feedback groups such as the EAG, utilizing energy burden data analysis provided by the Market Research team, and leveraging insights from PSE's Low Income Needs Assessment (LINA) Phase 1 and 2.

This work will inform program strategies to reduce or remove systematic and participation barriers and to target future outreach and marketing campaigns in communities with high energy burden. While CETA requirements primarily impact Energy Efficiency's Low Income Weatherization program, key learnings and best practices on how to best serve

highly impacted communities and vulnerable populations will be incorporated as applies across the entire portfolio. PSE's focus on Diversity, Equity, and Inclusion (see below) will also compliment this work by taking a comprehensive approach to historically marginalized and often underserved populations.

### *b. Clean Buildings Law*

The Clean Buildings Law, also known as House Bill 1257 (Clean Buildings), requires building owners with structures over 50,000 square feet to determine and comply with Energy Use Intensity targets (EUIt) and report them via ENERGY STAR Portfolio Manager (ESPM). Clean Buildings also specifies roles, plans, training, audits, energy efficiency measure (EEM) implementation, and documentation. Compliance is required beginning June of 2026 through June 2028, depending on the size of the building; however, it may take years for building owners to accomplish compliance.

Due to the requirement to collect and make reporting available for building performance, PSE is undertaking a significant upgrade to its Automated Benchmarking System in 2022 to comply with the requirement, and will develop the administrative processes to provide incentives by the indicated deadline.

Additionally, program staff will put significant focus on providing support services for customers impacted by this law, with an early emphasis on lower resourced and smaller organizations. In 2022-2023, PSE will continue to coordinate efforts across existing and new programs and help customers navigate to the offering that best fits their compliance needs.

### *c. Washington State Energy Code 2018*

The 2018 Washington State Energy Code (WSEC), which went into effect on February 1, 2021, raised baseline efficiency standards for major products that significantly impact Single Family Existing Midstream Space Heat, Water Heat, and New Construction programs. These higher baselines account for considerable reductions in savings potential via downstream and midstream rebates. Program staff will continue to monitor the impacts of WSEC and adaptively manage programs throughout the biennium.

### *d. House Bill 1444*

Washington State House Bill 1444 (HB 1444) adopted new baseline standards for lighting, appliances, and other efficiency measures at the beginning of 2020. This has continued to significantly impact several residential programs and commercial rebates as incentives were discontinued on measures that don't fall within the new requirements. Program staff continue to monitor both market saturation as well as manufacturer participation for fluctuation due to the significantly smaller rebate volume spread across many individual products.

### *e. Seattle Energy Code*

The City of Seattle Energy Code was updated in February 2021 to no longer allow most uses of natural gas space heating, and will be updated as of January 2022 to no longer allow Multifamily or Lodging facilities to install natural gas water heating equipment. These water heater installations typically represent about 45 percent of program participation

from the City of Seattle and are typically larger projects than the rest of PSE's service area. This code change will primarily impact space heat and water heat measures within Multifamily and Midstream HVAC and Water Heat programs.

## 3. Stakeholder Engagement

PSE proactively engaged with the public, vendors and regulatory stakeholders in the development of this plan. Program staff will continue to incorporate feedback and input throughout the biennium as form of adaptive management.

### *a. IRP Advisory Group*

PSE's 2021 Integrated Resource Plan (IRP) provides the basis for its 2022-2023 conservation potential. PSE conducted 13 IRP Advisory Group (IRPAG) and Technical Advisory Group (TAG) meetings in 2020 and 2021 for external stakeholders and regulators to provide input during the IRP planning process. Considerations associated with the conservation potential assessment included:

- PSE's updated load forecast, including the most recent biennium's efficiency accomplishments.
- Updated Commercial Building Stock Assessment (CBSA) data.
- Behavior change is included in the CPA.
- Measure savings and ramp rates consistent with the Seventh Power Plan of the Northwest Power and Conservation Council.
- Incorporation of new codes and standards.
- Incorporation of new and expanded measures.
- Updated data and assumptions with the latest PSE and regional data.
- Savings potential from measures that are included in the Northwest Energy Efficiency Alliance (NEEA) portfolio.

### *b. Request for Information*

PSE released a Request for Information (RFI) at the beginning of the planning year to solicit vendor feedback and input for new or innovative conservation measures, ideas, or programs. The RFI focused on the key priorities for Energy Efficiency and responses were limited to five pages with attachments.

PSE reviewed all RFI details internally and develops an "Idea Library" that could be referenced by program staff during the planning process. Any of the ideas (whether it be parts of, or entire programs) were available to be adapted into programs or included in a Request for Proposals.

### *c. Conservation Resource Advisory Group*

PSE maintained a close collaboration with its Conservation Resource Advisory Group (CRAG) throughout the BCP development process. CRAG members represent a broad

spectrum of public interests, from low-income customers and small consumers to contractors and large power users.

Meetings were held to discuss the development of the 2022-2023 BCP on March 16, June 2, July 28, August 25, September 29, and October 20, 2021. During these meetings, CRAG members provided advice on PSE's draft savings targets, budgets, program details and tariff revisions. Additionally, some CRAG members also participated in the IRPAG and TAG meetings.

During the 2022-2023 biennium, PSE will continue working closely with CRAG members on program developments and energy efficiency related issues as they emerge.

### *d. Public Participation Forum*

During the 2021 planning year, Energy Efficiency conducted a Public Participation Forum to offer an opportunity to ask questions and provide feedback on the 2022-2023 BCP and related energy efficiency programs. The goal of this meeting was to receive qualitative feedback about programs, incentives and marketing or outreach tactics from stakeholders directly involved in the delivery of energy efficiency programs.

## 4. Diversity, Equity, and Inclusion

PSE values diversity, equity, and inclusion (DEI) in all areas of practice, including procurement and program implementation. PSE recognizes that in order to better serve all customers equitably, DEI must be a business imperative that extends systemically from employees to vendors, suppliers and customers.

### *a. Customer and External Focus*

As PSE works to comply with CETA goals of 100 percent clean energy, the Company is striving to do so in a way that ensures all customers, especially those who shoulder an outsized share of environmental health impacts and climate burden, have a voice in and benefit from the transition to clean energy.

The EAG was formed to help seek perspectives from and broaden engagement with frontline communities, and particularly with low-income people and Black, Indigenous, and People of Color (BIPOC). Energy Efficiency staff have remained engaged with the EAG throughout the biennial planning process as ways to equitably distribute benefits and reduce burdens that stem from electric planning decisions are considered in this group.

Additionally, an internal DEI Committee was formed during the biennial planning process. The DEI Committee is an integrated planning group with PSE staff representing residential programs, business programs, programs support, marketing, outreach, and more. During the planning year, this group added a Supplier Commitment to Diversity section to the RFP process and has worked to develop a more comprehensive understanding of vulnerable populations, highly impacted communities, high energy burden, and emerging factors from the EAG. The group also worked to provide program staff with a basic planning template, metrics, and resources related to these efforts.

In 2022-2023, program staff will continue to assess program delivery against a matrix of metrics and practice adaptive management to ensure equitable delivery of programs.

### *b. Company and Internal PSE Focus*

PSE recognizes the deep connection between internal DEI efforts and how staff connect in the community, expectations of third parties and suppliers, and how customers are ultimately served. Energy Efficiency staff will continue to build upon current internal efforts during the 2022-2023 biennium.

## 5. Pilots and Pilot-like Initiatives

The purpose of developing pilot programs is to test the effectiveness and conservation potential of new technologies, test enhanced EM&V methodologies, discover ways in which evolving customer demands can be met, and demonstrate adaptive management.

Pilots help to inform future program design and potentially fill the long-term technology "pipeline". Pilot programs often originate from RFPs, Trade Ally and Industry feedback or publications, or through collaboration with adjoining utilities. Additionally, program staff consider WAC requirements, UTC expectations, and any applicable settlement stipulations.

Schedule E/G 249, included in Chapter 1: Customer Programs, discusses pilot programs with uncertain savings. However, there are also a number of pilot-like initiatives focused on specific measures or services within existing programs that are not officially classified as "pilots." These pilot-like initiatives are discussed within program discussion rather than under the umbrella of Schedule E/G 249 Pilots.

## 6. Utility Coordination

PSE has a well-established record of developing partnerships with other utilities in the Puget Sound region and often take a leadership role in coordinating measure offerings and incentives with other Washington utilities. Utility partnerships reduce the administrative burden on customers, contractors, and vendors and presents a uniform incentive structure and measure qualifications. Customers with locations in more than one utility district can be assured that their project will be managed with an equivalent experience, regardless of the specific energy supplier.

## 7. Continuous Improvement & Adaptive Management

Another PSE priority is to optimize program execution throughout the biennium while remaining nimble enough to respond to performance indicators like feedback and evaluations, or adjust to unexpected challenges in the market. All program staff, as well as Portfolio Support staff, continuously examine their business processes with the goal of enhancing the customer's conservation experience, reducing customer costs, and improving productivity.

In some cases, adaptive management results in the retirement of programs or measures that have become standard practice through market transformation, the adjustment of incentive

values, bundling (cross-marketing, or cross-program in some cases) offerings, running limited-time promotions, and more.[1]

## D. Programs Highlights

In 2022-2023, the Energy Efficiency team will maximize customer engagement and participation, while driving electric and natural gas conservation savings through innovation and adaptive management techniques, consistent with WAC 480-109-100(1)(a)(iv).

The majority of conservation programs that Energy Efficiency has successfully managed over the past biennia remain intact. Consistent with its established adaptive continuous improvement business development process, program staff examined their entire suite of measure offerings. They then incorporated applicable new measures, innovative delivery methods, and suggestions received through the Energy Efficiency RFP/RFI process to build a savings portfolio designed to meet the 2022-2023 electric and natural gas savings goals.

This section presents a brief summary of customer programs, including key savings drivers and major highlights for the 2022-2023 biennium. An overview of all customer conservation programs is provided in Chapter 1: Customer Programs, with further details available in Exhibit 3: Program Discussions.

### 1. Residential Energy Management

In 2022-2023, primary drivers of electric savings within the Residential Energy Management sector include the Single Family Existing (SFE) Space Heat, Residential Midstream HVAC and Water Heat, Home Energy Reports (HERs), and Multifamily Retrofit programs. Primary drivers of natural gas savings include SFE Space Heat, SFE Smart Thermostats, and HERs programs.

It's worth noting that PSE's natural gas target for the 2022-2023 biennium represents an increase of over 50 percent from the previous biennium. Increased savings from the previous biennium in SFE Space Heat and Home Energy Reports will be major contributors to achieving this dramatically higher target.

Key 2022-2023 program highlights for residential programs include:

- The income threshold for the Low Income Weatherization (LIW) program will be adjusted to 80 percent of Area Median Income (AMI) or 200 percent of Federal Poverty Level (FPL), whichever is higher. The new income threshold will be in compliance with WAC 480-109-060(22). In accordance with this change, the thresholds for the PSE's moderate income program, Efficiency Boost, will be adjusted to 90 percent of AMI. The new income thresholds represent a shift from State Median Income to AMI, a change that will better reflect regional income distribution within the state.

[1] PSE ensures that all elements of program design and execution are consistent with condition (7)(a) through (7)(c), which outline requirements around sector inclusion, program outreach, and incentive levels.

- A new program, Residential Midstream HVAC and Water Heat, will be added to the SFE suite. Midstream rebates were previous included with the downstream rebates within the Space Heat and Water Heat programs. The downstream rebates within Space Heat and Water Heat will focus on electric resistance to heat pump conversion while midstream will focus on engaging distributors to increase sales by reducing first costs and increasing stock.
- The SFE Showerheads program will be retired, effective January 1, 2022 due to low cost-effectiveness following the retirement of all showerhead measures from the RTF in 2020. Thermostatic Shower Valves will continue to be offered as a measure through Multifamily Retrofit and LIW programs.
- The SFE Home Appliances program will retire the appliance decommissioning service and dryer rebates and continue to provide rebates on front-loading washers in 2022-2023.
- In late 2021, the HERs program added approximately 85,000 additional reports to participating gas-only customers which significantly expands gas savings in the 2022-2023 biennium. The program also expects a significant uptick in savings due to post-enrollment ramp-up from dual-fuel customers added during the previous biennium.
- PSE will offer increased equipment and weatherization incentives as well as customized Home Energy Reports for manufactured home customers. Additionally, in 2022 the Manufactured Home New Construction program will begin accepting natural gas rebates in symmetry with available electric rebates.
- During the 2022-2023 biennium, PSE will utilize internal and external research to develop culturally-relevant outreach to bring integrated EE opportunities to highly-impacted communities and vulnerable populations. Related to this effort, there will be a particular focus on “transcreation” of collateral and contractor training to better reach ESL customers within the Residential Energy Management sector.

## 2. Business Energy Management

In 2022-2023, primary drivers of electric savings within the Business Energy Management sector include Custom Lighting Grants, Lighting to Go, Small Business Direct Install (SBDI), and Commercial/Industrial (C/I) Retrofit programs. Primary drivers of natural gas savings include C/I Retrofit, Custom Grants, and the Commercial Strategic Energy Management (CSEM) program.

It’s worth noting that increased savings from the previous biennium in C/I Retrofit will be a major contributor to achieving PSE’s dramatically higher natural gas target for 2022-2023.

Key 2022-2023 program highlights for residential programs include:

- The Industrial Energy Management program will pilot a new industrial pay-for-performance option for Industrial Systems Optimization participants to encourage bundling of capital

and O&M tune-up measures and capture more capital project savings identified during the ISOP scoping phase.

- The Clean Buildings Accelerator (CBA) was added in late 2021 as a new program under C/I Retrofit. This specialized program will help building owners comply with the new Clean Buildings requirements through a four month program and quarterly support workshops for program graduates to address evolving needs. PSE offers several pathways to guide building owners to compliance through existing programs. The CBA focuses on the early adopter incentive process and emphasizes support for lower resourced and smaller organizations
- Also under C/I Retrofit, a new Telecommunications Energy Management program will be added in 2022. This program will provide comprehensive and flexible capital and performance-based incentives for commercial facilities operating radio, telecom, cellphone, broadband or cable services.
- The Pay for Performance program will transition from a Schedule 249 Pilot to a fully operational program under Schedule 253, Energy Performance Incentive Programs. This program also supports compliance with the Clean Buildings Law early adoption program.
- The Commercial Rebates suite of programs will emphasize regional coordination in the coming biennium. Program staff will work with Seattle City Light and Snohomish Public Utility District (PUD) to coordinate Midstream HVAC, Water Heat, Commercial Foodservice and the Lighting to Go programs. Additionally, the SBDI program will continue its partnership with Snohomish PUD to target small businesses in their service area.
- PSE will retire the Commercial Laundry program as of January 1, 2022. This program was previously grouped under the umbrella of Commercial Foodservice & Commercial Laundry and will be sunset due to low customer adoption and lack of uptake in the current market.
- The Lodging Rebates program was reintroduced in late 2021 and will continue into the 2022-2023 biennium with incentives for hotel and motel customers.

# I. Customer Programs

This chapter is intended to provide an overview of all PSE's Energy Efficiency customer conservation programs, presented in order of their Conservation Schedule order and include a brief description of the program, eligibility, and major revisions for the 2022-2023 biennium. As applicable, each overview will also highlight coordination with other utilities, pilot-like initiatives and attention to hard to reach and/or vulnerable populations.

Specific discussions of plans to achieve 2022-2023 savings goals and meet customer expectations can be found in Exhibit 3: Program Details. Exhibit 3 reflects the most accurate representation of planned 2022-23 offerings and services, including programs and activities that do not have an associated Conservation Schedule order. Program details covered in Exhibit 3 include but are not limited to: eligibility, delivery method, implementation model, customer experience, target market, customer incentives and measures, and marketing and outreach plans.

## A. Residential Energy Management

This section gives an overview of customer programs in the Residential Energy Management (REM) sector.

### 1. Low Income Weatherization

**Schedules E/G 201**

The Low Income Weatherization (LIW) program improves the energy efficiency of single family residences, multifamily structures and manufactured/mobile homes, provides education on routine ways to reduce energy use and costs, and supports health and safety measures and energy-related repairs. Funding from this program supports many cost-effective home weatherization measures for low income customers receiving natural gas and/or electric heat from PSE.

As of January 1, 2022 the income threshold to participate in the LIW program will be increased to 80 percent of Area Median Income (AMI) or 200 percent of Federal Poverty Level (FPL), whichever is higher. The new income threshold will be in compliance with WAC 480-109-060(22).

During the 2022-23 biennium PSE will continue to make low income customers in the manufactured home sector a priority audience, leveraging findings from the Low Income Needs Assessment (LINA) Phase 1 and 2, as well as the Department of Health cumulative impact assessment to inform program design and customer engagement.

Additionally, PSE staff will coordinate with the Department of Commerce and Department of Health to meet Clean Energy Transformation Act (CETA) legislative requirements with a

particular emphasis on Section 12[2] and Section 14[3]. Additionally, staff will engage with customer groups such as the Equity Advisory Group (EAG) and leverage energy burden data analysis and the results of the LINA Phase 1 and Phase 2 studies.

As highly impacted communities and vulnerable populations are identified, these communities will be folded into LIW customer engagement strategies. This will inform program strategies to reduce or remove systematic and participation barriers and to target future outreach and marketing campaigns in communities with high energy burden.

PSE will also continue collaborating with stakeholders in high needs communities to disburse special contract funds established as part of the Settlement Agreement in Docket UE-161123. Potential projects in 2022-2023 include a partnership between The Energy Project, the Lummi Nation, and SPARK NW to serve low-income customers in the Lummi Nation tribe with renewable energy. This potential project is expected to be confirmed and begin in 2022 with the installation of solar panels on up to five buildings which in turn would lower operating expenses and energy bills for social service providers while creating a funding stream to directly service eligible low-income households.

## 2. Single Family Existing

### Schedules E/G 214

This suite of programs is the largest contributor of savings in REM and includes the following programs:

- Residential Lighting,
- Space Heat
- Water Heat,
- Residential Midstream HVAC and Water Heat
- Weatherization
- Home Appliances,
- Smart Thermostats,
- Home Energy Reports, and
- Efficiency Boost.

[2] Section 12 pertains to utility data collection

[3] Section 14 pertains to the application of cumulative impacts assessments to inform future program design where available

PSE retired the Showerheads program, effective January 1, 2022 due to low cost-effectiveness following the retirement of all showerhead measures from the Regional Technical Forum in 2020. The remaining measure in this program, Thermostatic Shower Valves, will continue to be offered through the Multifamily Retrofit and LIW programs, however rebates will no longer be available through PSE Marketplace.

### a. Residential Lighting

The primary focus of the Residential Lighting program is providing instant discounts on qualifying LED products and fixtures to single family residential electric customers through participating retailers. Retailers in the program include brick and mortar establishments and the PSE Marketplace online shopping platform. Management of the Residential Lighting program excludes the Lighting to Go program, which can be found in the Business Energy Management section.

Washington State's House Bill 1444 adopted the EISA expanded definition of a general service lamp (GSL) at the beginning of 2020. PSE elected to discontinue incentives on the measures that are within that definition starting February 1, 2020. The program was significantly impacted by this change and program staff continue to monitor both LED market saturation as well as manufacturer participation for fluctuation due to the significantly smaller rebate volume spread across many individual products.

In 2022-2023, PSE continues to provide incentives on residential lighting not impacted by HB 1444, including indoor LED fixtures, outdoor LED fixtures, T8 LED fixtures, T8 LED retrofits, and patio style LED string lights.

### b. Space Heat

The Space Heat program accounts for more than 10 percent of anticipated electric and over 20 percent of natural gas savings across residential programs. This program manages incentives and installations of gas and electric home heating systems. The program previously included PSE’s midstream space and water heat programs but starting in 2022-2023 includes only downstream space heat rebates. Downstream water heat rebates will be included under the Water Heat program and midstream rebates will be included under a new Residential Midstream HVAC and Water Heat program.

In 2022-2023, the program will deploy higher incentive levels to help target hard to reach customers, specifically those with manufactured homes as well as low-to-moderate income customers served by the Efficiency Boost program. Most notably, gas furnaces incentives will be doubled for the coming biennium and there will be a focus on helping customers to convert from electric resistance to heat pump systems. The program is also working with its Trade Allies to create materials to better inform customers about HVAC replacements.

### c. Water Heat

This Water Heat program manages downstream incentives and installations of single family residential water heating for both electric and natural gas customers. This program was previously included alongside space heat and midstream rebates.

In 2022-2023, the program will deploy higher incentive levels to help target hard to reach customers, specifically those with manufactured homes as well as low-to-moderate income customers served by the Efficiency Boost program.

Additionally, program staff will continue collaborating with Tacoma Power, Snohomish Public Utility and NEEA to provide coordinated retail incentives for heat pump water heater at regional Lowe's and Home Depot stores. PSE is also investigating split Heat Pump Water Heater systems and ways to enhance the retail delivery experience for customers at the point of sale.

Program staff will continue monitoring several factors that may impact this program in 2022-2023, including an increase in the price of steel and adoption of the 2018 Washington State Energy Code (WSEC) that went into effect on February 1, 2021.

### *d. Midstream HVAC and Water Heat*

The goal of the Midstream Residential HVAC and Water Heat program is to help distributors to increase sales by reducing first costs, encourage upselling of high-efficiency products, and increase stock so that it is readily available to customers in emergency replacement situations. This program comprises nearly a quarter of anticipated electric savings across residential programs.

In 2022-2023, program staff are focused on increased distributor and contractor engagement to promote awareness of the Midstream HVAC and Water Heat program. Midstream HVAC and water heat incentives were previously combined with downstream space and water heat incentives. Since midstream rebates capture participation from a large portion of the market which created the risk of double-paying rebates, PSE streamlined midstream-eligible products to only be rebated through this program.

PSE will also continue coordinating with Seattle City Light and Snohomish PUD to align rebate offerings across the region and encourage higher distributor participation. Additionally, program staff will monitor for and work to mitigate possible supply chain disruptions, including product availability, product cost, and contractor availability.

### *e. Weatherization*

The Weatherization program helps residential customers, including manufactured home customers, to improve the "shell" of their home through installation of windows, insulation, air sealing, and duct sealing. This program will contribute a significant amount of gas savings across residential programs in 2022-2023.

Although this program remains as one of PSE's longstanding residential programs, there are two key changes for this biennium. First, the insulation and air sealing incentive delivery model will change from percentage of project cost to a per-square-foot incentive to align with other regional utilities. Second, the 'whole home' air sealing measures were retired during the previous biennium due to lack of participation and low cost-effectiveness.

During the previous biennium, program staff piloted higher incentives for projects that bundled measures which resulted in higher savings, lower customer costs and less customer disruption. These 'Customer Bonus' incentives will continue in 2022-2023 for

projects with three or more measures. Additionally, PSE will continue to engage contractors and explore opportunities for coordinated trainings with regional utilities and the Comfort Ready Home initiative supported by Bonneville Power Administration (BPA).

### f. Home Appliances

The Home Appliances program incentivizes residential customers to upgrade to ENERGY STAR® appliances. Major program revisions for this biennium include the retirement of PSE's appliance decommissioning service and ending of ENERGY STAR® dryer and heat pump dryer rebates.

In 2022-2023, the Home Appliances program will provide downstream rebates for front loading clothes washers. The majority of savings derived from these measures will be electric savings, however incidental gas savings are captured through reduced water heating use in ENERGY STAR rated clothes washers.

### g. Smart Thermostats

This program, previously named Web-Enabled Thermostats, incentivizes residential electric and natural gas customers to upgrade their regular or programmable thermostat to either an ENERGY STAR® rated smart thermostat or a PSE-approved Electric Line Voltage Connected Thermostat. The Smart Thermostats program will account for more than 10 percent of gas savings across residential programs.

In 2022-2023, PSE will continue offering post-purchase downstream incentives as well as instant rebates via PSE Marketplace. Program staff will also explore the option of adding an instant discount option for contractors.

### h. Home Energy Reports

Home Energy Reports (HER) are customized reports sent to participating residential electric and gas customers to help them better understand their home energy consumption, motivate them to conserve, and provide targeted calls to action tailored to help each customer save money and improve energy efficiency. This program is the most significant driver of both electric and natural gas savings across residential programs.

In late 2021, PSE added approximately 85,000 additional reports to participating gas-only customers which significantly expands gas savings in the 2022-2023 biennium. Program staff also expect an increase in both electric and gas savings from dual-fuel customers added in 2018 and 2019, due to the ramp up of savings after the first years of participation. Additionally, PSE will continue to periodically add customers to the program due to move-out attrition in the new biennium. For example, in the previous biennium approximately 50,000 customer were added to replace customers who left the program due to move-outs.

PSE will continue to enhance and adapt the energy saving messaging provided to customers based on their input and feedback. PSE will also evaluate this program on an annual basis, as it has since the program's inception.

### *i. Efficiency Boost*

Efficiency Boost, provides increased rebate amounts for various measures within the Space Heat, Water Heat, and Weatherization programs in order to increase access to efficiency for moderate income customers who may not qualify for low-income programs.

In 2022-2023, Program staff will focus on expanding awareness of this program through targeted marketing and aims to grow the program to more than 700 customers served annually. Additionally, staff will engage with the PSE Equity Advisory Group, leveraging energy burden data and coordinating with CETA requirements. As part of these efforts, the income thresholds for the program will be adjusted to align with the new thresholds for the LIW program. As of January 1, 2022, LIW income thresholds will be adjusted to 80 percent of AMI or 200 percent of FPL, whichever is higher and Efficiency Boost thresholds will adjust to 90 percent of AMI.

## 3. Single Family New Construction

**Schedules E/G 215**

The SFNC program works with builders and raters to influence higher-than-code energy efficiency homes throughout the PSE service area. This program includes Manufactured Homes New Construction (MHNC), in which conservation measures are promoted through manufacturers and retailers selling qualified homes to residential PSE customers.

With the change to 2018 Washington State Energy Code (WSEC), the baseline for efficiency for new construction homes has increased significantly. Due to this higher baseline, savings will be harder to come by for PSE's SFNC program. Additionally, most HVAC and water heat savings are no longer eligible for incentive through the SFNC program since they are incentivized through the midstream model. These two factors will be key challenges for the SFNC program in 2023 and 2023.

In this biennium, incentives will include Built Green 4-Star and 5-Star as well as NEEM 1.1 and NEEM 2.0. PSE added the NEEM 1.1 and NEEM 2.0 natural gas measures to the MHNC program and in 2022 will begin accepting natural gas rebate requests in symmetry with the electric measures. PSE is also investigating a code credit-based incentive for 2022-2023, but is still determining a savings value to align with each credit.

Additionally, PSE will continue partnering with Snohomish County Public Utility District (SnoPUD) to align incentives and program rules to simplify the rebate experience for manufactured home retailers that exist in and around locations close to both PSE and SnoPUD service areas.

## 4. Multifamily Retrofit

**Schedules E/G 217**

The Multifamily Retrofit program provides comprehensive whole-building and property design assistance that aggregates both in-unit and common area opportunities. The program serves existing multifamily buildings with five or more attached residential dwelling units as well as multifamily campuses which have a mixture of building types including buildings with less than five units. This program comprises over 10 percent of electric savings across residential programs.

In the coming biennium, program staff will target approximately 40,000 units and will focus on driving participation among the moderate income customer segment. The program aims to pilot in-language outreach and education about the benefits of energy efficiency and changing customer behavior. Additionally, program staff will partner with PSE's LIW program to provide resources and raise program awareness of PSE's products and services through "Energy Fair" events.

### 5. Multifamily New Construction

**Schedules E/G 218**

The Multifamily New Construction program provides comprehensive whole building savings with tiered incentives based on per kWh or per therm rate. Staff closely coordinate with developers, architects, and engineers early in design process to influence efficient solutions for market rate and affordable multifamily new construction projects. The MFNC program provides increased incentives for affordable housing construction projects that have an overall average occupant income of 60 percent AMI or less. This aligns with the WA State Housing Finance Commission's Low Income Housing Tax Credit.

In the 2022-2023 biennium, program staff will aim to seek deeper savings through an emphasis on Early Design Assistance projects. As in other new construction programs, there are a number of factors that pose a risk to savings, including: more stringent WSEC, stricter standards from HB 1444, and the shift in HVAC and water heat incentives to the midstream program.

Early Design Assistance provides an opportunity to drive participation through the value add of technical assistance and cost/benefit analysis to assist customers in seeking deeper savings. PSE will increase market penetration through a third party vendor that will work closely with architects, engineers, and developers to host design charrettes and provide technical assistance.

## B. Business Energy Management

This section gives an overview of customer programs in the Business Energy Management (BEM) sector.

### 1. Commercial/Industrial Retrofit

**Schedules E/G 250**

This suite of programs provides customized incentives to small, medium, and large commercial and industrial customers for energy efficiency upgrades to lighting, equipment, building shell, industrial process, and select O&M improvements. Standard incentive approaches include existing building commissioning, major controls projects, and variable refrigerant flow projects. Program staff also work with financial decision makers at the customer's facility to ensure the customer is aware of cost-savings opportunities, including review of energy saving projections that can help obtain favorable financing rates.

In 2022-2023, two programs will be added to the C/I Retrofit suite of offerings: the Clean Buildings Accelerator program and the Telecommunications Energy Management program. Additionally, program staff will improve recruitment with an emphasis on individual account management and a streamlined handoff process. This will help new customers navigate through program offerings and find the most suitable fit for their needs.

### *a. Custom Grants – Lighting and Non-Lighting*

Custom grants provide commercial and industrial customers calculated incentives. PSE considers any cost-effective measure that provides quantifiable energy savings. Custom grants are available through two programs: Custom Grants (non-lighting measures) and Custom Lighting Grants (lighting and lighting controls measures). These programs will account for roughly a quarter of both electric and natural gas savings across business programs in 2022-2023.

In the coming biennium, both electric and natural gas incentives will be increased for non-lighting measures. Additionally, program staff are exploring direct partnerships with property managers and school districts to promote the installation of advanced controls during lighting upgrades. The Custom Lighting Grants program will also explore partnerships with property management firms that engage in service and repair work.

### *b. Business Lighting Express*

The Business Lighting Express program is a hybrid between Business Lighting custom grants and Lighting To Go point-of-sale incentives. It provides prescriptive incentives for exterior and limited interior lighting upgrades for contractors and customers doing maintenance work.

In 2022-2023, program staff will explore the addition of lighting-only tenant improvement and new construction projects into the Business Lighting Application. Additionally, staff will evaluate a bonus incentive when occupancy sensors are added to a project as a way to encourage a higher rate of adoption for lighting controls in projects.

### *c. Industrial Programs*

The Industrial Energy Management program provides a comprehensive set of offerings, focused on tuning-up industrial systems and reducing energy usage. Offerings include traditional custom capital projects, Industrial Systems Optimization (ISO), Strategic Energy Management (SEM), and the Comprehensive Small Industrial offering, which provides custom grants targeted at small industrial sector customers.

For the following biennium, an offering will be added to the program targeted at customers participating in ISO to encourage customers to pursue capital measures identified in the ISO process by bundling them with the O&M measures and offering additional incentives. This will allow ISO participants to capture more capital project savings identified in the scoping phase.

Additionally, PSE will expand the SEM offering by recruiting two wastewater and/or water treatment cohorts and three manufacturing cohorts. In the Small Industrial offering there will be an increased focus on hard-to-reach small industrial and manufacturing customers.

Overall, program staff will increase targeted marketing and outreach to increase the number of applications submitted and improve connections with industry partners such as industrial equipment vendors and maintenance service companies.

### *d. Clean Buildings Accelerator*

Launched in late 2021, the Clean Buildings Accelerator (CBA) program is designed to assist building owners to comply with the requirements of Washington State House Bill 1257, the Clean Buildings Law. This new program provides strategic energy management services through a four month program. It is best suited for lower resourced and smaller organizations, including public organizations and non-profits, and/or customers that have less experience with energy efficiency programs.

### *e. Telecommunications Energy Management*

A new addition for 2022-2023, the Telecommunications Energy Management program (TEM) will provide comprehensive and flexible capital and performance-based incentives to telecommunication customers receiving commodity electric and natural gas service from PSE. Telecommunication customers include internet service providers, radio, telecom, cellphone, broadband, and cable television providers.

This program will include any cost-effective measure that provides quantifiable energy savings, including capital measures and/or operational and maintenance measures. The program anticipates achieving primarily electric savings with cost effective natural gas projects to be developed where opportunities exist.

## 2. Commercial/Industrial New Construction

**Schedule E/G 251**

The C/I New Construction program works with customers, developers, tenants, owners, designers and builders of new commercial and industrial facilities to influence efficient design, building components and equipment. The program provides incentives for installation of cost-effective energy efficient projects that exceed Washington State Energy Code or standard industry practice. Incentive pathways include whole building incentives, EUI performance method, and both lighting and non-lighting component approach.

In 2022-2023, this program will contribute over 10 percent of electric savings across business programs. While the program will continue to be a significant contributor to electric savings,

more stringent code requirements and local natural gas legislation for new construction decrease opportunities for gas savings. Additionally, the program expects a decrease in indoor agriculture projects due to lower customer participation.

Beginning in 2022, a new base payment will be implemented that will assume a 5 percent savings guarantee for projects using the EUI performance method pathway. In the coming biennium, program staff will focus on more partnerships and integrated outreach with the Residential Multifamily New Construction program in order to increase participation of large and small commercial and multifamily customers. Both program teams will collaborate on outreach to developers, architects, and engineers to help drive new construction projects.

Staff will also conduct more commercial Early Design Assist (EDA) meetings for customers who do not have access to energy modeling. The EDA meetings will provide estimated savings for a variety of high efficiency design options to help the customer determine the best design for their project. EDA meetings will also provide information on PSE's incentive paths and will create a pipeline of projects for the program.

## 3. Energy Performance Incentive Programs

### Schedules E/G 253

Energy Performance Incentive Programs, previously named Commercial Strategic Energy Management, includes whole-building, performance based programs that achieve cost-effective electric and natural gas savings through energy management practices.

#### *a. Commercial Strategic Energy Management*

Specifically for commercial customers, the Commercial Strategic Energy Management (CSEM) program is intended for customers with a facility or portfolio of facilities that use more than 1,000,000 kWh or 135,000 therms annually. Participating customers are incentivized to establish an integrated strategic energy management program and manage energy through behavioral and operations and maintenance measures. This program contributes a significant proportion of electric and natural gas savings, including over a quarter of gas savings, within the business energy management sector.

During the 2022-2023 biennium, program staff will focus heavily on customer recruitment with a specific consideration for reaching small commercial customers. PSE also incorporated new software implementation into the budget for the coming biennium. This new software will replace the current benchmarking and whole building analysis systems which is becoming outdated.

#### *b. Pay for Performance*

Newly added to the Schedule 253 tariff as a standard program, the Pay for Performance (P4P) program was previously included under Schedule 249 as a pilot. The P4P program helps customers achieve energy savings through deep retrofits in commercial buildings with over 50,000 square feet. The program also supports compliance with Washington State House Bill 1257 for customers enrolled in the Clean Buildings Law early adoption program.

In the 2022-2023 biennium, program staff are focused on streamlining the application process and approval process as well as program navigation. With the addition of new programs and customers seeking compliance with the Clean Buildings Law, there will also be an emphasis on improving the customer intake experience through clear program navigation and handoff between staff supporting managed accounts or outreach and program staff.

## 4. Large Power User/Self-Directed

### Schedule E258

This program provides incentives that support self-directed energy efficiency projects proposed by large power users on PSE rate schedules 448, 449, 458, and 459. Participating customers receive funding based on their electric usage and are responsible for proposing cost-effective project(s) to utilize their allocation. The program has a four year cycle with both non-competitive and competitive phases.

In 2022 the program will be in in fourth year of its 2019-2022 program cycle, and 2023 will be the first year of the following program cycle. Due to the nature of participants' conservation project plans, and RFP participation during the competitive versus noncompetitive phases of the four year cycle, the final year of a cycle typically captures the highest energy savings. Thus, the combined 2022-2023 electric savings will be approximately 25 percent higher than the previous biennium.

Over $5 million was not utilized during the competitive phase in 2021 and remains unspent or allocated. In 2022, PSE will make the remaining funds available to Schedule 258 customers to use on cost-effective projects, customer-driven engineering studies, or turn-key engineering studies provided by PSE approved engineering services providers.

It's worth noting that Schedule 40 customers, who were eligible for the program previously, were converted to the next applicable rate Schedule in 2020 and were ineligible to participate in the competitive phase in 2021. These customers were eligible to transition to PSE's C/I Retrofit or C/I New Construction programs.

## 5. Technology Evaluation

### Schedules E/G 261

During the 2022-2023 planning process, there were no new energy-efficient technologies on the horizon that weren't already being evaluated in other forums, such as the 2021 RFP/RFI process. Therefore, no savings or expenses were budgeted for 2022-2023. PSE program staff will continuously scan for new technologies throughout the year and will consider, in consultation with the CRAG, amending the Technology Evaluation status for the 2023 Annual Conservation Plan.

## 6. Commercial Rebates

### Schedules E/G 262

The Commercial Rebates suite of offerings is comprised of several rebate programs that focus primarily on small-to-medium sized commercial customers, many of which are considered hard-to-reach:

- Commercial Retail Lighting - Lighting to Go,
- Commercial Foodservice & Commercial Laundry,
- Lodging Rebates
- Commercial HVAC,
- Commercial Midstream HVAC and Water Heat, and
- Small Business Direct Install

### *a. Commercial Retail Lighting– Lighting to Go*

The Lighting to Go program provides customers with point of sale discounts for prescriptive lighting at commercial lighting wholesalers, distributors, and suppliers. This program is a significant contributor to electric savings within the Business Energy Management sector.

In 2022-2023, the program adds interior fixtures to the measure mix, including troffers, High Bay strip fixtures, and downlight retrofit kits. While the anticipated sales volume is somewhat uncertain, program staff expect strong sales and distributor participation with an increase in participation due to the expanded fixture rebate offering.

### *b. Commercial Foodservice & Commercial Laundry*

The Commercial Foodservice program serves customers who utilize commercial foodservice equipment. Foodservice measures are offered through both midstream (instant rebates) and downstream models. The Commercial Laundry program was previously grouped under the umbrella of Commercial Foodservice & Commercial Laundry. As of January 1, 2022, PSE sunset the Commercial Laundry program due to low customer adoption and lack of uptake in the current market.

Commercial Foodservice contributes over 10 percent of natural gas savings across business programs.

**Commercial Foodservice**

Offering a full suite of equipment categories, PSE’s midstream model was first in the country for the commercial foodservice sector. Partnering with local, regional, and national sales channels has proven crucial to broadening program reach.

In 2022-2023, the program will work to onboard the largest online retailer in the country into the program. Additionally, the updated standard enumerated in Washington State House Bill 1444 affects some commercial cooking equipment within the portfolio and there continues to be some uncertainty in the market due to retailers continuing to stock lower efficiency items. In response to this, PSE will continue rebates on fryers, steamers, and dishwashers and program staff will conduct a mid-year assessment in 2022 to determine efficiency baselines for 2023.

### c. Lodging Rebates

Lodging rebates are designed to help hotel and motel customers afford the significant cost associated with making changes to their greatest energy burden – heating and cooling. This program is offered through a downstream model and rebates are set at an "up to" amount based on the individual cost of the equipment. PSE reintroduced this program in 2021 with enhanced incentive amounts.

After initial interest and customer participation in spring 2021, facility closures, supply chain delays, and shortages caused a slowdown in activity. In 2022-2023, program staff will continue to monitor the market and explore options to bolster participation.

### d. Commercial HVAC

This program provides HVAC rebates to small and medium sized commercial customers to help reduce energy usage without having to upgrade costly rooftop equipment. This program works well as a next step for small commercial customers that have participated in the SBDI or Business Lighting program.

While customer participation has seen a slight decline, program staff are focused on marketing strategies to drive participation in 2022-2023. These strategies include targeted messaging delivered directly to selected business and collaboration with manufacturers, distributors and contractors to co-promote HVAC incentives.

### e. Commercial Midstream HVAC and Water Heat

This program works with HVAC and water heater distributors to make high-efficiency HVAC equipment more readily available to commercial customers. This midstream model ensures customers who need emergency or last-minute replacements install qualified products from locally stocked distributors. This program accounts for nearly a quarter of electric savings across business programs.

Revised Federal Minimum Efficiency Standards will take effect in 2023, impacting approximately 40 percent of the current HVAC units listed in the AHRI. For 2022-2023, PSE will add an interim tier of rebates to capture large commercial customers in need of HVAC systems that more closely align with the new standards.

Additionally, the Seattle Energy Code will be updated as of January 2022 to no longer allow Multifamily or Lodging facilities to install natural gas water heating equipment. These installations typically represent about 45 percent of program participation from the City of Seattle and are typically larger projects than the rest of the service area. PSE anticipates

natural gas savings in this program to be lower than the previous biennium due to this change.

### *f. Small Business Direct Install*

The Small Business Direct Install (SBDI) program contributes over 10 percent of electric savings across business programs. SBDI is designed to help hard-to-reach small business customers in completing lighting, refrigeration and HVAC retrofit upgrades. Participants receive a free energy assessment and are guided through PSE's rebate and custom grant programs. Specifically targeted toward hard-to-reach customers, this program is intended for lower use rate schedules and buildings with less than 10,000 square feet. Customer segments typically include hospitality, restaurant, grocery, retail office spaces, and agriculture.

For 2022-2023, the program is continuing its partnership with Snohomish County PUD to deliver SBDI in their service area. In addition, program staff will continue exploring additional opportunities for natural gas savings and options to better serve small business natural gas customers.

Program staff will also coordinate with other commercial offerings to provide a streamlined customer navigation process between similar program offerings. Additionally, PSE anticipates re-launching the popular community blitz series to engage local cities, municipalities, and tribal customers. This approach was successful in the past but was put on hold due to limitations on in-person activities in the last biennium.

## C. Pilots

**Schedules E/G 249**

This section presents a summary of pilot offerings and initiatives related to either Residential or Business Energy Management. These pilots with uncertain savings are excluded from PSE's EIA Penalty Threshold, and are listed in the Pilots section of Exhibit 1's Portfolio View.

The following are pilots that PSE estimates have uncertain savings.

### 1. Retail Choice Engine

Also known as the Efficient Product Guide, this pilot is designed to provide customers with an online marketplace, where they can compare energy-efficient products side-by-side rather than researching products individually. The site provides an "energy score", alongside pricing, customer ratings, product details, and more. This pilot will continue to be implemented and evaluated using treatment and control groups in order to evaluate impacts. There are approximately 110,000 residential customers in the various treatment and control groups.

### 2. Single Family AMI Enhanced Engagement

This pilot uses AMI meter data to provide customers with near real-time energy usage information via an in-home display. This immediate feedback, paired with customer education, is intended to help customers understand how their home uses energy and how to reduce energy usage. This pilot is expected to launch for customer participation by early 2022 and ramp up to approximately 1,500 customers. Additionally, this pilot will be evaluated during the coming biennium.

### 3. Hybrid Heat Pump Pilot

This pilot is designed to quantify the carbon emissions benefit of using heat pumps in conjunction with gas heating furnaces. In parallel, this pilot aims to quantify the electric peak-load benefit, or reduction, when continuing to use gas heating only on the coldest days and an electric heat pump for the remainder of the season. In 2022-2023, PSE will collaborate with distributors, contractors, builders and customers to identify cost-effectiveness, barriers, value proposition, technological constraints, and other key factors that will assess the potential to create a dual fuel heating program.

### 4. Small and Medium Business Virtual Commissioning

Previously named Small and Medium Business (SMB) AMI Enhanced Engagement, this pilot is now known as SMB Virtual Commissioning. This pilot provides a limited number of qualifying customers with very detailed analyses, and potentially disaggregated energy use reporting, providing participating customers with conservation calls to action. PSE provides site specific low-cost/no-cost recommendations and assists the customer to virtually implement the recommendations. In 2022-2023, PSE will continue to evaluate the impacts of COVID-19 on the baseline model and expects to have served 120 customers by 2023.

## D. Regional Programs

This section provides an overview summary of programs that do not fit into the Residential or Business Energy Management Sectors, are of a more regional nature (consisting of sites, installations or facilities outside of PSE's service area), or are not directly managed by Energy Efficiency program staff.

### 1. Northwest Energy Efficiency Alliance

**Schedule E/G 254**

NEEA's updated operations plan for PSE's service area in 2022-2023 is included in this BCP as a standalone document, Exhibit 5.

### a. *Participation in NEEA Operations*

Several PSE staff members participate on NEEA committees. Some committees are advisory in nature and others are technically-oriented. NEEA also maintains selected sub-committees and working groups that report up to the senior committees. The majority of the operational committees advise four groups that provide advice and recommendations to the NEEA executive board and board of directors. PSE sits on the board of directors.

Energy Efficiency staff often participate on more than one committee or working group, as well as ad-hoc and limited-time work groups. PSE staff participation includes the following:

- Regional Portfolio Advisory Committee,
- Cost-Effectiveness Advisory Committee,
- Commercial New Construction Initiative
- Natural Gas Advisory Committee,
- Integrated Systems Coordinating Committee,
- Controls Working Group,
- Northwest Strategic Energy Management Collaborative,
    - Collaborative Funders Group,
    - Industrial Collaborative Funders Group,
- NEEA Heat Pump Water Heater Pilot, and
- Regional Emerging Technology Advisory Committee

PSE representatives that are a part of the Regional Portfolio Advisory Committee vote on broad initiatives. Other participants collaborate with committee or work group members outside of the committee forums, and bring issues and new initiatives to their groups.

In 2022-2023, PSE plans to participate in NEEA's savings-generating programs, as well as the currently-planned "optional" programs:

- SEM—Strategic Energy Management
- Multifamily Stock Assessment
- End Use Load Research

As well as other that may be developed during the biennium.

PSE includes the source of NEEA's biennial savings forecast in the BCP's Exhibit 5, Supplement 1, which enumerates NEEA's conservation programs as allocated to PSE. It is important to note that, regardless of the delivery mechanism, if a savings classification is included in PSE's CPA, PSE will pursue it, whether delivered through NEEA or through an Energy Efficiency program.

### *b. Natural Gas Market Transformation*

The Natural Gas Advisory Committee (NGAC) currently serves both technical and advisory functions. There are no sub-committees established as of the filing of this BCP. As a major funder, PSE staff also participate on this committee.

In 2022-2023 NEEA will focus its efforts on emerging technology and early program development. Key priorities for the natural gas portfolio include:

- Efficient Rooftop Units (RTUs),
- Natural gas heat pumps,
- Natural gas heat pump water heaters,
- Dual-fuel residential new construction,
- Emerging technology and early program development,
- Dual-fuel strategies and activities,
- Support for the Residential Building Stock Assessment,
- Extra-regional engagement to drive Pacific Northwest strategic priorities, and
- Triple pane window initiative.

NEEA does not attribute savings to the specific territory from which they originated. Rather, NEEA apportions savings according to the funder's share. In PSE's case, NEEA would assign 42.01 percent of the regional savings to PSE.

PSE's share of the natural gas market transformation funding is 42.01 percent, with a 2022-2023 total of $3.18 million.

## 2. Targeted DSM

**Schedule 219**

Targeted DSM (TDSM) is an energy efficiency initiative to identify localized conservation and demand response potential, develop plans to achieve a defined percentage of that potential, then implement those plans to deliver identified energy efficiency and capacity savings.

The Targeted DSM program uses avoided costs for a specific municipality to calculate the cost-effectiveness of conservation measures. This allows PSE to offer rebates and incentives to PSE customers in these locations that are higher than those in its broader service territory. These rebates and incentives are available only during the duration of the specific NWA Project, as determined by PSE.

In 2022-2023, the TDSM initiative will offer the same measures that are available through standard programs. TDSM will offer, however, an increased amount on measure incentives in the specific localities, either through a bonus amount attached to the incentive, or additional,

separate incentives. PSE provides a complete listing of available measures in Exhibit 3: Program Details.

### 3. Distribution Efficiencies

***Schedule E292***

The Production and Distribution Efficiency program involves implementing energy conservation measures within PSE's own production and distribution facilities that prove cost-effective, reliable and feasible. Within production facilities (power generation), conservation measures reduce ancillary loads at the site and exclude efficiency improvements made to the generating equipment itself. These measures may include, but are not limited to, lighting upgrades, variable speed drives and compressor upgrades. For transmission and distribution (T&D) efficiency, improvements are implemented at PSE's electric substations.

Analyses performed during 2022-2023 planning revealed that there are no cost-effective retrofit measures available for PSE generation facilities. Program staff will maintain examination of these facilities in 2022 for incremental efficiency improvements that can be implemented during other capital upgrade work and will adjust its 2023 Annual Conservation Plan, should cost effective conservation opportunities in generating facilities be identified.

For the 2022-2023 biennium, PSE plans to implement CVR at substations most likely to provide cost-effective energy savings. CVR involves lowering the feeder voltage settings in order to receive energy savings when operating the distribution system more efficiently and within the ANSI Standard of 114 – 126 V. The plan for CVR implementation includes required system upgrades, implementation of RTF prescribed measurement & verification protocols, as well as the required phase-balancing work, which is a precursor to successful CVR implementation.

As of the third quarter of 2021, there are approximately 158 out of a total of 297 substations that have a potential for CVR. Of these, 16 have had CVR implemented, with additional projects planned for 2022-2023.

The planned number of CVR projects in 2022-2023 is an expansion of CVR project implementation. PSE is still implementing the Advanced Metering Infrastructure (AMI) project and ADMS projects. These two projects will enable Voltage Var optimization, an improved CVR method that allows for deeper levels of savings over PSE's current CVR implementation method of line drop compensation (LDC). For the 2022-2023 Biennial Conservation Plan, staff is anticipating to budget for a study that provides an updated methodology for energy savings determination for Voltage Var CVR projects. This study is dependent on the implementation of PSE's first Volt Var pilot project that is dependent on the completion of the AMI and ADMS projects.

## E. Other Customer Programs

PSE separates the Other Electric Programs category from other Electric and Gas Rider programs because they are not used in calculating cost-effectiveness of the overall Portfolio. For

the 2022-2023 biennium, Customer Connected Solar and Targeted Demand Response will be included in this category.

## 1. Net Metering

***Schedule E150***

As of July 2021 PSE has a total of 95 MW of net metered generation operating in its service territory. Program staff anticipate that strong adoption will continue into the next biennium due to the following balance of positive and negative policy and market conditions: an increase to utility net metering requirements in Washington as of July 2019; declining equipment prices; a fully obligated budget for the State Renewable Energy Production Incentive Program as of June 2019; the return of state sales tax exemption for solar installations as of July 2019; and upcoming reductions to the federal investment tax credit. PSE also anticipates that during the 2022-2023 biennium, Washington's Clean Energy Transformation Act may begin to bring new opportunities for customer generation to sectors that have previously been under-served by the State's renewable energy incentive programs.

## 2. Targeted Demand Response

**Schedule E/G 249A, E/G 271**

The purpose of the Localized Demand Response Pilot (DR) is to evaluate DR options applicable to identified Non-Wired Alternatives (NWA) projects in specific, targeted localities. Attributes this pilot program will evaluate include technology requirements and performance, customer behavior and preferences, impacts and integration of DR to Company operations, program costs, demand reductions achieved, energy savings achieved, and localized distribution system benefits. PSE expects to gain experience with DR technologies, a greater understanding of customer acceptance and tolerance of Demand control, the need for customer incentives (financial or other), and demand reduction effectiveness and reliability.

Demand Response projects will be both electric and natural gas. PSE provides a complete discussion of the pilot in Exhibit 3: Program Details.

# II. Support & Planning

## A. Portfolio Support

Portfolio Support functions and activities provide needed services to Residential and Business Sector program staff and customers. Services include delivering a wide range of options for customers to ask questions and obtain information about PSE's energy efficiency programs, and ensure that PSE's awareness messaging is consistent across all platforms. Portfolio Support staff process enormous amounts of rebate applications and measure installation data, integrate PSE cost-effectiveness and UES savings methodologies in the region, and provide resources for developing new and updated program offerings.

The following provides a summary overview of activities and major updates included under the umbrella of Portfolio Support. Full descriptions of each team and associated 2022-2023 activities may be found in Exhibit 3: Program Details.

### 1. Programs Support

The Programs Support group provides critical services to program staff, which is particularly crucial during planning periods, as they facilitate several planning initiatives for program staff, manage the RFP/RFI process, and produce and maintain many process manuals. Their roles also include IT support, product positioning and Integrated Go-To Market planning, internal communications, and change management. Other teams included under the Programs Support group include: the Data and Systems Services, Verification, Rebates Processing, and Trade Ally Support.

#### *a. Data & Systems Services*

This team is responsible for reviewing and ensuring data integrity from a wide variety of sources, including vendors, program staff, and contractors. They interface with several data systems, including SAP, DSMc (a project tracking system), and EES Tracking (a portfolio tracking and forecasting system). The team provides systems for program staff to enter measure data on a monthly basis to feed reporting systems, and uses measure data and projections to build monthly forecasting models.

In 2022-2023, the team will continue employing adaptive management and Six-Sigma techniques to ensure updated and reliable data, reporting, and forecasting tools. The team will also continue collaborating on data-driven dashboards to help Energy Efficiency staff better monitor and improve performance.

#### *b. Rebates Processing*

This team plays a critical role in PSE's ability to achieve its customer participation and conservation goals, as they are a key energy-efficiency contact point for PSE customers. The staff must be well versed in all Energy Efficiency programs, the terms and conditions of PSE incentives, and be sensitive to how they represent the Energy Efficiency department to customers. The team also uses feedback provided by PSE constituents to

collaborate with program staff to make process improvements within the programs throughout the year.

Team efforts in 2022-2023 include, but are not limited to, redesigning rebate forms for clear instructions and qualifying criteria, analyzing rejection reasons for the root cause of non-qualified rebates, and simplifying the application process for customers. Additionally, the team will be transitioning Appliance and Thermostat rebates to in-house processing.

### *c. Verification*

The Verification team will perform both on-site and virtual inspections and confirmations of randomly-selected participant homes and business to assure energy-efficiency measures are properly installed. The team will update verification policies, protocols, guidelines, and processes as necessary.

The team has increased capacity for more virtual verification options for customers and will continue to expand virtual verifications in 2022-2023, except where on-site inspections are required to retain the integrity of the verification.

### *d. Trade Ally Support*

In 2022-2023, the Trade Ally Support team will manage PSE's memberships in trade associations that benefit customers, including:

- Association of Energy Service Professionals (AESP),
- Building Owners & Managers Association (BOMA) of Seattle & King County,
- Consortium for Energy Efficiency (CEE),
- E Source,
- Electric League of the Pacific Northwest,
- Energy Solutions Center (ESC), and
- Northwest Energy Efficiency Council (NEEC).

PSE provides extensive discussions of the objectives satisfied for each Energy Efficiency Trade Ally organization, including organization description, the nature of the expense, the need for PSE participation, and if there are associated sponsorships or events in Exhibit 3: Program Details.

## 2. Trade Ally Network

The Trade Ally Network (TAN) is PSE's formal conduit for trade ally engagement with and participation in PSE's Energy Efficiency Programs. The TAN team engages approximately 200 independent contractors through the network who deliver energy efficiency (and ancillary) products and services to PSE's customer base.

In addition, the TAN team develops tools and resources to engage broader groups of trade allies including distributors, manufacturers, professional organizations, etc., to support more inclusive opportunities for trade ally partnerships.

### 3. Automated Benchmarking System

This free website, called *MyData* and launched in the autumn of 2013, provides building owners an easy to use, self-service portal that allows users to set up automated monthly reporting of their building's energy usage. The tool was designed and offered by PSE, and provides building owners, managers and operators a convenient way to track and assess energy consumption of their buildings. Customers register their property to receive quick and accurate data on a monthly basis for their building. Customers can track energy usage for a portfolio of buildings, track the results of energy efficiency projects, develop Energy Star® ratings, and comply with state and city regulations.

In 2022-2023, an extensive upgrade is planned for the software, which now must serve the data needs of building owners and operators throughout the PSE service area, consistent with requirements of HB 1257. This system replacement accounts for approximately $4 million in budget increase for the coming biennium and includes development, PSE IT support, and subscription costs.

### 4. Energy Advisors

This expert group brings efficiency into PSE's customer homes by guiding them in changing behaviors, understanding their energy use, and assisting them in using PSE's programs that are best for the customer's individual circumstances. Energy Advisors also promote and explain PSE's renewable energy programs, community challengers, available promotions and tax incentives. The Energy Advisors assist customers with these services over the phone, email, via virtual and in-person events and through social media.

### 5. Energy Efficient Communities

The Energy Efficient Communities team emphasizes proactive, direct residential and business customer outreach, with a focus on in-person engagement.

This strategy will augment the other forms of energy-efficiency exposure that customers receive, including phone contact, digital (including social media, radio, television), and print. The team works to discover locally-appropriate ways of engaging with customers by leveraging PSE's resources, community knowledge and partner support.

As Energy Efficiency considers its hard-to-reach and potentially underserved customers, the Energy Efficient Communities team will focus their attention on the design of new- and expansion of its existing- outreach tactics to reach these customers. Energy Efficient Communities team members are embedded within specific regions of PSE's service area to provide an improved connection to the multiple community stakeholders that Energy Efficiency serves throughout the service area.

The team works to find areas with lower program participation to directly target engagement with customers. They provide leads for the small business programs through partnerships with cities, local business associations and community groups, through designing direct engagements as well as through presentations to the small business community.

Specific activities and customer engagements can be found under the header of “Marketing and Outreach Plan” in each program description within Exhibit 3: Program Details.

## 6. Customer Engagement

Beginning in the 2022-2023 BCP, this section replaces Exhibit 7: Marketing and Outreach Summary.

The Customer Engagement team’s (CET) responsibilities include the promotion of energy efficiency program offerings to achieve targets. This is accomplished by exercising promotional marketing and outreach to various market segments: residential direct-to-consumer, commercial and industrial, retailer, dealer, multi-family retrofit, home and commercial builder and trade ally groups—with the goal of influencing and motivating those in PSE’s service area to take specific, energy-efficient actions. The team anticipates customer needs, fosters community within specific channels and ensures delivery of PSE services and products through a variety of marketing programs, promotions, communications, outreach, and events.

Communications efforts in 2022-2023 will continue to focus on the customer experience. Messaging and campaign deliverables will encourage customer engagement with PSE programs, events and promotions. Overall marketing and outreach initiatives will drive customers to engage in programs, offerings, savings, and promotions online and in person at various events per COVID-19 safety guidelines and protocols.

The Customer Engagement team will continue to partner closely with the EE Communities team and relationship management teams to ensure that energy efficiency messaging and programs are consistent, streamlined and targeted geographically. The Customer Engagement team will continue to align deliberate planning and outreach with regional teams and locations that can serve as efficient delivery channels for program opportunities within localized communities with localized needs. CET will continue to assess how to leverage PSE employees and contractors as delivery channels within their personal communities, and as they come into contact with customers in their daily work effort.

Puget Sound Energy will continue to utilize its’ customer-friendly brand platform that will incorporate energy efficiency messaging in 2022-2023 and is expected to positively influence adoption of energy efficient behaviors and use of energy efficient products.

Overall, the CET theme for 2022-2023 is to continue the focus on customer engagement, anticipate their needs, promotion and awareness, and deliver targeted and integrated programs and offerings to our customer base.

Specific activities and customer engagements can be found under the header of “Marketing and Outreach Plan” in each program description within Exhibit 3: Program Details.

## 7. Events

The Events team will continue to manage requests from communities—including those considered to be hard-to-reach or proportionately underserved.

The team seeks out events and presentation opportunities while engaging with organizations and municipalities as part of the overall outreach strategy for each of our Energy Efficiency programs. PSE pivoted to virtual events as a way to stay connected with customers during COVID-19 and will continue to plan events and follow safety guidelines during the different phases of re-opening.

Specific activities and customer engagements can be found under the header of "Marketing and Outreach Plan" in each program description within Exhibit 3: Program Details.

## 8. Customer Digital Experience

Customer Digital Experience is designed to support the development and maintenance of tools that simplify the energy-efficiency educational process, providing interactive, engaging experiences that drive PSE's customers to manage and lower their energy usage. The team also supports interactive content development, e-newsletters and other miscellaneous software applications, including online form, database and web hosting services.

These tools help customers understand the specifics behind their energy usage, show neighbor comparisons (residential customers)[4], and provide new ways to encourage efficient behaviors, by suggesting personalized tips, tools, ideas and checklists, based on a customer's automated energy usage profile and self-assessment information.

## 9. Customer Awareness Tools

The Customer Awareness Tools category is comprised of four electronic services provided to PSE customers via a variety of media, designed to fit customers' communication expectations. The services include Unusual Usage Alerts and Seasonal Readiness Emails.

## 10. PSE Marketplace

Launched in January 2021, PSE Marketplace is a successor to ShopPSE and is an online shopping platform featuring a selection of energy-savings devices for gas and/or electric customers. The products sold and instant rebates provided through this service are aligned with and represented in program measure tables.

PSE and the vendor will continue to focus on the customer journey to streamline participation and maximize value. For 2022-2023, PSE will also consider adding more products to the marketplace.

[4] Specific customer details; addresses, names, account information, etc. are rigorously protected. Instead, only general, non-specific comparisons will be provided.

### 11. Market Integration

For 2022-2023, the Market Integration group will continue supporting energy efficiency customer awareness efforts, including advertising, social media, email and other content production. The team will also launch an Energy Efficiency promotional partnership with local professional hockey team, The Kraken, and Climate Pledge Arena.

## B. Research and Planning

The primary deliverables of this group are providing critical market research, customer information, survey results, demographic information, evaluations, assistance in the management of programs, and the development of PSE's Conservation Potential Assessment every two years.

### 1. Conservation Supply Curves

The purpose of the Conservation Supply Curve is to complete a Conservation Potential Assessment (CPA) for the company's Integrated Resource Plan (IRP).

PSE's 2023 Electric and Natural Gas CPA process will begin in early 2022 to inform the subsequent biennium planning cycle. The 2022-2023 budget includes costs to complete the CPA, which includes input analysis for the modeling, the modeling analysis itself, stakeholder engagement, reporting, and development of inputs for biennial program planning.

### 2. Strategic Planning

The Strategic Planning group's 2022-2023 primary activities will include support for the implementation of the regional Residential Building Stock Assessment, research focused on leveraging AMI interval data to understand peak load impacts from conservation measures and programs, and continued support for the Regional End-Use Load Research study.

### 3. Market Research

The Market Research activities include energy-efficiency customer satisfaction surveys and tactical program target-marketing support. This team of analysts will provide much-needed customer data, including an understanding of customer perceptions, barriers to the adoption of energy-efficient behavior, and tracking customer awareness of energy-efficiency programs. They will also support program-specific requests for analyses of localized customer characteristics, attitudes, energy-usage trends, and behaviors.

### 4. Program Evaluation

Exhibit 6: Evaluation Plan, describes an ongoing process for prioritizing measures and programs, as well as the four-year timetable to evaluate all Energy Efficiency programs, consistent with condition (6)(c). A detailed table of evaluations planned for the upcoming biennium are included in the exhibit.

# III. Regulatory & Compliance

In this chapter, PSE will focus specifically on how it developed its 2022-2023 electric and natural gas targets and corresponding budgets as well as its compliance with relevant regulations.

## A. Building the 2022-2023 Conservation Targets

The 2022-2023 detailed savings and budgets are contained in Exhibit 1: Savings and Budgets. This file is over 100 pages and PSE recommends that Stakeholders review it in its Microsoft Excel format to maximize effectiveness. Hyperlinks and hyperlink buttons on each page makes navigating this formidable workbook much more straightforward. PSE presents detailed budgets by program, classified by budget category, in the Exhibit 1 electric and natural gas Sector views.

PSE provides a summary view of the calculation elements that PSE applied in developing its electric Portfolio Savings Targets in Table III-1. Table III-2 provides the same steps applied to the natural gas target. Both tables reside as worksheet tabs within Exhibit 1. The tables also outline the categories that PSE excluded to reach the final 2022-2023 EIA Penalty Threshold and Natural Gas Penalty Threshold.

**Table III-1: Electric Portfolio Savings Target Calculation Summary**

| Puget Sound Energy 2022-2023 Electric Portfolio Savings | | | | | |
|---|---|---|---|---|---|
| **Index** | **Description** | **MWh** | **aMW** | **Comment** | **Calculation** |
| | Colored cells correspond to indicated lines in Exhibit 1: *Savings and Budgets, 2-Year Portfolio View*. | | | | |
| | ***Calculate the EIA Target*** | | | | |
| a | CPA Pro-Rata Share<br>*IRP & CPA Guidance* | 497,564 | 56.8 | Represents all available conservation that is cost-effective, reliable, and feasible, as a 20% pro-rata share of PSE's 10-year conservation potential, per RCW 19.285.040(1). | Figure *3*, Exhibi |
| **b** | **EIA Target** | **497,564** | **56.8** | Meets RCW 18.285.040(1)(a) and (b) requirements | |
| | ***Calculate the Penalty Thresholds*** | | | | |
| c | Subtract NEEA Savings | -28,382 | -3.24 | ("Option A" in savings calculation table from NEEA forecast--current method) | |
| **d** | **EIA Penalty Threshold** | **469,182** | **53.6** | $58-60/MWh shortfall penalty, based on 2020 inflation, per RCW 19.285.060. | **= b - c** |
| **e** | **Decoupling Threshold** | **24,878** | **2.8** | 5 percent of EIA Target | **= b * .05** |
| | ***Complete the Portfolio*** | | | Use CPA Pro-Rata Share as foundation. | |
| f | Add Firm Savings Excluded from CPA | 9,550 | 1.1 | 2022/2023: 449s, special contracts | |
| g | Add Pilots with Uncertain Savings | 4,725 | 0.5 | | |
| **h** | **Total 2022-2023 Utility Conservation Goal** | **536,717** | **61.3** | This is the total Portfolio to which Energy Efficiency is managing. | = b + e + (f + g) |

**Table III-2: Natural Gas Portfolio Savings Target Calculation Summary**

| Puget Sound Energy 2022-2023 Natural Gas Portfolio Savings | | | | |
|---|---|---|---|---|
| **Index** | **Description** | **Therms** | **Comment** | **Calculation** |
| | ***Calculate Natural Gas Penalty Threshold*** | | ***These are specific elements that comprise the Portfolio View of Exhibit 1*** | |
| a | CPA First Two Years<br>*IRP Guidance* | 9,262,931 | | |
| b | Subtract NEEA Savings | 0 | | |
| **c** | **Total Natural Gas Penalty Threshold** | **9,262,931** | Penalty outlined in Stipulation Agreement, UG-011571 Section M43. | **= a + b** |
| **d** | **Decoupling Threshold** | **463,147** | Penalty = Up to $75,000, depending on range | **= a *0.05** |
| | ***Build the Total Utility Conservation Goal*** | | | |
| e | Add Pilots with Uncertain Savings | 65,250 | | |
| **f** | **Total 2022-2023 Utility Conservation Goal** | **9,791,327** | This is the total Portfolio to which Energy Efficiency is managing. | = c + d + e |

## 1. EIA and Natural Gas Targets

Consistent with RCW 19.285.040(1)(a) and (b), and calculated from the 2021 IRP data for 2022-2023 potential, the indicated 497,564 MWh is PSE's EIA Target. WAC 480-109-100 (3)(b) requires that the electric biennial target be "no lower than" the pro rata share of a utility's ten-year conservation potential. The Natural Gas Target of 9.26 million therms is consistent with RCW 80.28.380.

In both the EIA Target and Natural Gas Target, NEEA forecasted savings are included, as those savings are contained in the CPA analyses.

The 2021 CPA represents the foundation of all 2022-2023 PSE savings calculations: PSE builds all other Targets—from the ground-up—from these savings figures. PSE denotes the CPA Pro-Rata Share (electric) and CPA first two years (natural gas)/EIA Target on line a of the "Building the Target" electric and natural gas tables in Exhibit 1: Savings and Budgets.

## 2. Penalty Thresholds

PSE calculates each of its four penalty thresholds using the CPA Pro-Rata Share (electric) and CPA first two years (natural gas) as their bases: two subtractions determine the EIA and Natural Gas Penalty Thresholds, and two multiplications result in the Decoupling Thresholds.

### a. EIA Penalty Threshold

To calculate its EIA Penalty Threshold, PSE subtracts NEEA forecasted savings, consistent with the Commission's standard practice[5]. The resultant Threshold is subject to a penalty outlined in RCW 18.285.070(1) and WAC 480-109-070. For the 2022-2023 biennium, NEEA forecasts its savings to be 3.24 aMW, or 28,382 MWh. When the NEEA savings are subtracted from the EIA Target (which is equivalent to the CPA Pro-Rata Share), the resultant EIA Penalty Threshold is 469,182 MWh.

The electric penalty structure is discussed in RCW 19.285.060 and WAC 480-109-070.

### b. Natural Gas Penalty Threshold

PSE worked with its advisory group to review the CPA and agreed it advisable to use the first two years of the ten-year CPA guidance for its two-year natural gas savings target as opposed to the pro-rata share, primarily due to strong pressures from ramp rates with very high later-year savings potential. To calculate the penalty threshold, PSE subtracts NEEA therm savings estimates from the natural gas CPA first two years value of 9.26 million therms. There are currently no NEEA forecast therm savings in PSE service territory for 2022-2023. Therefore, the CPA first two years is equal to the Natural Gas Penalty Threshold of 9.26 million therms.

PSE's penalty structure for its Natural Gas Penalty Threshold is outlined in the 2002 Stipulation Agreement, Section M.43.

### c. Decoupling Thresholds

PSE's electric Decoupling Threshold of 24,878 MWh is based on a multiplying the EIA Target by 5 percent, as set forth in PSE's Amended Decoupling Accounting Petition in Docket UE-121697 Section III.G.31, page 17. PSE will be subject to the same penalty amount for achievement shortfall as the EIA Penalty Threshold.

PSE calculates the Natural Gas Decoupling Threshold of 463,147 therms by multiplying the CPA first two years by 5 percent. This methodology is set forth in the 2017 Staff Initial Brief in the 2017 General Rate Case Docket UG-170034, Section III.A.53, page 27. The natural gas decoupling shortfall penalty is a tiered amount, ranging from $20,000 to $75,000.[6]

[5] Please see page 5, Washington Statewide Advisory Group (SWAG) Report on 2018 Washington State Investor Owned Utility Energy Efficiency Joint Advisory Group Activities and Outcomes, Chapter 2, Section 2, ¶ 2. Docket UE-171087.

[6] These amounts are proposed in Prefiled Testimony, Jon Piliaris, page 145.

### 3. Total Utility Conservation Goals

Once program staff have the "top-down" savings goals as determined by the IRP guidance, they build savings programs from the bottom-up.

The Total Utility Conservation Electric and Natural Gas Goals are comprised of the following:

- The EIA Target/CPA guidance (which include NEEA savings forecasts),
- The Decoupling Thresholds,
- Firm Savings Excluded from the CPA, Pilots with Uncertain Savings.

PSE lists these components in the electric and natural gas "Building the Target" tables in Exhibit 1: *Savings and Budgets*.

### 4. Clean Energy Implementation Plan Conservation Goal

Outside of PSE's detailed biennial targets and savings goals is a new conservation goal created to meet the requirements of CETA and the Clean Energy Implementation Plan (CEIP)[7]. The CEIP requires a 4-year total utility conservation goal; however, WAC 480-109 details a two-year biennial conservation plan process with penalties. Therefore, the CEIP four-year forecast goal will be updated by the 2024-2025 detailed biennial conservation planning process.

In order to generate a total four-year Energy Efficiency savings forecast an additional two years of the 2021 CPA pro-rata share plus 5 percent decoupling plus the same amount of additional non-CPA savings will be added to the 2022-23 Total Utility Conservation Goal for years three and four. Midway through the CEIP cycle, a progress report will be filed that will update years three and four of the CEIP with the WAC 480-109 prescribed Total Utility Conservation Goal approved by the UTC for the 2024-2025 time period.

## B. Potential Penalties

PSE is subject to potential penalties for falling short of its Commission-approved electric and natural gas targets. In the situation where there are factors that occur outside of the utility's control, penalties may not be assessed. [8,9]

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[7] Clean Energy Transformation Act, (RCW 19.405.040(1)(a))

8 For Electric target: Energy Independence Act, (RCW 19.285.040)(1)(e)).

9 For Natural Gas target: PSE General Rate Case, Docket Nos. UE-011570 and UG-011571, Settlement Terms For Conservation. Section M, paragraph 42, page 10.

## 1. Electric Penalties

The EIA financial penalty of potentially $58 - $60[10] per MWh of savings shortfall applies to the Commission-approved EIA Savings Threshold. The decoupling penalty—which will be subject to the same financial penalty approach that is used for the EIA Penalty Threshold—applies only to the specific incremental decoupling amount.[11]

PSE adjusted the penalty amounts annually—beginning in 2007—for the rate of change in the inflation indicator, gross domestic product-implicit price deflator, per RCW 19.285.060(1). Electric penalties would apply only after PSE exhausts its available excess conservation from eligible previous biennia.

PSE will exclude NEEA savings from its EIA Target to reach a proposed EIA Penalty Threshold. PSE's Decoupling Threshold is calculated based on 5 percent of the EIA Target.

## 2. Natural Gas Penalties

PSE's potential penalty range in the case of a natural gas conservation shortfall is outlined in Section M.39 and M.43 of the Stipulation Agreement, Exhibit F of Order 01 in Docket UG-011571:

> *"**39**. Achievement of annual targets for savings from cost-effective electricity conservation programs and from cost-effective natural gas programs, as established in Section D, shall be subject to a penalty mechanism. …(Electric discussion replaced by Docket UE-100177)…PSE shall compute, every two years, the total natural gas savings captured through PSE natural gas efficiency programs during each two-year time period, and divide this total by two, to determine an average annual natural gas savings achievement for that period. These computations shall determine whether the Company achieved each of the minimum savings targets, on average. If the Company achieves its average annual savings goals, as determined with the Advisory Committee, during a two-year period, then no penalty will be applied for that two-year period. If the average annual savings targets are not achieved during a two-year period then a penalty is assessed according to Paragraph 43; the penalty applies only to each individual year in which that year's actual annual target is not met."*
>
> *"**43**. The financial penalties for failure to achieve the annual conservation savings targets are as follows.*
>
> - *Achieve savings that are 90 to 99% of the goal: $200,000 penalty applies*
> - *Achieve savings that are 75% to 89% of the goal: $500,000 penalty applies*

10 The indicated potential penalty amount is based on the 2020 rate of inflation—the latest available at the time of the 2022-2023 BCP development. The actual penalty amount will change, depending on the 2021 inflation rate.

11 PSE's Amended Petition for Decoupling Mechanisms, Docket Nos UE-121697 and UG-121705, page 17, Section G.31: "[…] Specifically, while the electric decoupling mechanism is in place, PSE will agree to achieve electric conservation five percent above the biennial targets set by the Commission, and PSE will agree to voluntarily submit to financial penalties for failing to meet this higher level of conservation achievement. […]" (emphasis added)

- *Achieve savings that are less than 75% of the goal: $750,000 penalty applies"*

As a standard practice, PSE will subtract NEEA's natural gas savings forecast from its natural gas CPA guidance to arrive at its proposed Natural Gas Penalty Threshold. At the time of the publication of the BCP, however, no natural gas savings are forecast for NEEA in the coming biennium.

PSE's proposed natural gas decoupling penalty ranges from $20,000 for meeting 4.5 percent to 5 percent of the natural gas decoupling threshold, $50,000 for meeting between 3.75 and 4.5 percent, and $75,000 for meeting less than 3.75 percent of its decoupling threshold.[12]

## C. Developing the 2022-2023 Conservation Plan

### 1. Compliance with RCW 19.285

This BCP and its Exhibits are consistent with RCW 19.285.040 (1)(a), which indicates that utilities must identify their achievable cost-effective conservation potential, reviewing and updating the assessment every two years thereafter. The BCP also satisfies § (b), which states that utilities shall establish and make publicly available a biennial acquisition target for cost-effective conservation consistent with their identification of the achievable opportunities.

### 2. Compliance with WAC 480-109

Throughout the BCP, PSE provides references to the applicable WAC section. PSE ensures that its conservation operations are in compliance with WAC rules in a manner similar to the process that it uses to track and report compliance with the biennial conditions, Exhibit 7: *Condition Compliance Checklist*. PSE tracks and reports on WAC compliance by incorporating the WAC requirements that are unique, in addition to PSE's biennial conditions, into its Exhibit 7.

Consistent with the requirements outlined in WAC 480-109-100(1) through (3), addressing the development of the 2022-2023 BCP, PSE conducted 13 Integrated Resource Planning Advisory Group (IRPAG) and Technical Advisory Group (TAG) meetings over the course of 2020 and 2021. PSE also met condition 3(b) in October 2019 when its CPA contractor presented to the CRAG the scope and design of the CPA. PSE then met condition 3(c) on June 2 when initial CPA findings were presented to the CRAG.

PSE maintained a close collaboration with the CRAG throughout the BCP development process. PSE held CRAG meetings to discuss specifics around the development of the 2022-2023 BCP on March 16, June 2, July 28, August 25, and September 29, 2021. In addition to these meetings, PSE maintained a high level of CRAG engagement, as required in applicable

[12] Docket UG-170034, Public Version Testimony, (UE-170033) 2017 GRC Piliaris direct, page 145 of 159.

sections of WAC 480-109-110(1). Exhibit i of this BCP satisfies subsections (ii), (iv) and (v) of WAC 480-109-120(1)(b).

### 3. Compliance with WAC 480-107-065

In addition to legislative updates to WAC 480-109 in 2019, the Washington State Legislature updated WAC 480-107 with the addition of section 065, which is specific to acquisition of conservation and efficiency resources. This update requires the utility to establish a competitive procurement framework each biennium in consultation with the CRAG and file it within this BCP. PSE presented this framework to the CRAG and it was approved on June 2, 2021. The framework is filed within this BCP as Exhibit 3, Supplement 1 for approval by the UTC.

## D. Developing the 2022-2023 Conditions

As of the 2021 BCP filing date, PSE continues to work with UTC staff in the development of 2022-2023 conditions..

The remaining subsections of WAC 480-109-120(1) are satisfied in other Chapters and Exhibits in the 2022-2023 BCP, as noted in Table III-3 below**Error! Reference source not found.**.

**Table III-3: WAC 480-109-120 Requirement Addressed in the 2022-2023 BCP**

*(All Section (1) of WAC 480-109-120 requirements are paraphrased.)*

| Requirement | 2022-2023 BCP Content |
|---|---|
| **(a) Biennial Conservation Plan filed by November 1 of each odd year.** | The 2022-2023 BCP and its Exhibits. |
| **(b)(i) Must include a request that the Commission approve the potential and target** | Executive Summary |
| **(b)(iii) The plan must include the potential, target, program details, biennial budgets, and cost-effectiveness calculations** | • Potential & Target: Executive Summary, Exhibit i<br>• Program Details: Exhibit 3<br>• Biennial Budgets: Exhibit 1<br>• Cost-Effectiveness Calculations: Exhibit 2 |
| **(b)(vi) The plan must include the evaluation, measurement & verification framework (and sub-parts A through C).** | Exhibit 6 Supplement 1<br>Sub-part C is addressed in Exhibit 6. |

## E. Conservation Tariff Schedule Revisions

Minor revisions were necessary for the 2022-2023 biennium: primarily Schedules 83 and 183 (electric and natural gas general conservation overarching rules) and Schedule 201 (Low Income Weatherization). To facilitate the operations of its new Targeted DSM program, PSE created three new Schedules, including an electric and natural gas schedule providing an overall outline of the program itself, and a natural gas version of Schedule 249A, addressing targeted Demand Response. PSE provides summaries of those modifications in Table III-4 and Table III-5.

**Table III-4: Summary of 2022-2023 Electric Conservation Tariff Schedule Revisions**

| Program | Tariff Sheet | Section | Revision Reason |
|---|---|---|---|
| **Electricity Conservation Service** | 83-G | 10) Expenditures and<br>12) Termination | Update expenditures for 2022-2023 anticipated spending and update termination date to December 31, 2021. |
| **Residential Low-Income** | 201 | 1) Availability | Added language specifying new income eligibility thresholds. |
| **Energy Performance Incentive Programs** | 253 | Program Title | Changed program title from Resource Conservation Management (Energy Performance Incentive Programs) to Energy Performance Incentive Programs |
| **Large Power User Self-Directed Program** | 258A.10 | 4) Funding<br>5)Program Mechanics | Update funding cycle and collection dates |
| **Large Power User Self-Directed Program** | 258C.1 | Program Cycle | Update program cycle dates including non-competitive phase and competitive phase. Also include language around offering multiple competitive phases until money is exhausted in the cycle. |

Additionally, PSE removed references to electric-to-natural gas fuel conversion or switching in applicable Schedules.

**Table III-5: Summary of 2022-2023 Natural Gas Conservation Tariff Schedule Revisions**

| Program | Tariff Sheet | Section | Revision Reason |
|---|---|---|---|
| **Natural Gas Conservation Service** | 183-g | 10) Expenditures and 12) Termination | Update expenditures for 2022-2023 anticipated spending and update termination date to December 31, 2021. |
| **Residential Low-Income** | 1201 | 1) Availability | Added language specifying new income eligibility thresholds. |
| **Energy Performance Incentive Programs** | 253A.9 | Program Title | Changed program title from Resource Conservation Management (Energy Performance Incentive Programs) to Energy Performance Incentive Programs |

PSE provided mark-up copies of all revised tariff sheets to the CRAG on September 29, 2021.

It is notable that PSE only files the revised tariff sheets—not the entire Schedule—with the UTC. Although the revised documents are included as Exhibit 8 of the BCP as a courtesy to Stakeholders, PSE files the tariff revisions separately from the BCP.

## F. Planning Considerations

The following list highlights some of the key assumptions and factors that program staff used to guide their planning processes. Throughout the upcoming biennium, program staff will continue their application of adaptive management principles to ensure that they meet performance objectives by validating, adjusting, and re-evaluating these assumptions in an effective and resourceful fashion.

- PSE's IRP/CPA Guidance
- Economic and Market Assumptions
- Technological, Codes & Standards Assumptions
- Regional & Utility Actions and Partnerships
- Regulatory and Legislative Assumptions
- Regional Technical Forum Unit Energy Savings (UES) Values and Updates
- DEI, Equitable Distribution of Benefits, and Burden Reduction

## G. Potential for Pilot Offerings

Although PSE receives several suggestions for potential conservation measures or related services through its standard RFP solicitation process, program staff also are constantly vigilant for new and exciting technologies that may have an immediate impact on the Portfolio. PSE provides comprehensive discussions of its Pilot initiatives in several Sections of this BCP. Unless otherwise noted, each component discussion applies to both electric and natural gas savings targets.

## H. RTF Measures Impact

As a proportion of Residential Energy Management's (REM's) overall conservation goal (and also contributing to a portion of Business Energy Management's [BEM's] savings goal), another key consideration of PSE's 2022-2023 conservation goal is the examination of RTF UES measures.

The 2022-2023 savings and budget figures are substantial in light of continued downward revisions of many key prescriptive measure UES values, both electric and natural gas. Energy

Efficiency program staff demonstrated creativity and adaptive management in developing innovative solutions and services that will sustain 2021's momentum in light of these adjustments. Several programs, both in REM and BEM, were affected by these UES value revisions. PSE notes prescriptive measure elements, including savings values and unit count projections in the applicable program detail pages of Exhibit 1.

The 2022-2023 BCP reflects, when applicable, RTF UES values that were in effect and published on the RTF website as of September 1, 2021. To accommodate program planning needs and WAC requirements[13], Energy Efficiency's Measure Revision Guidelines indicate that when a prescriptive measure's UES value is in effect and published by September 1 of a particular year, PSE will align to that value in January of the following year. In applicable cases, PSE will follow accepted methodology and protocols to develop a PSE UES value[14] that is consistent with WAC 480-109-100(5)(a).

## 1. RTF Prescriptive Measures

WAC 480-109-100(5) requires PSE to use the Regional Technical Forum's (RTF) UES[15] measure savings values; unless, as indicated by (5)(a), evaluation data, engineering analyses, or other reliable sources substantiate the use of a different savings value.

PSE consistently complies with these requirements, and presents its measures and their savings values in Exhibit 4: *Prescriptive Measure Values* for CRAG review (as required by WAC 480-109-100(5)(b)).

## 2. RTF Measure Revisions and Timing

The RTF adjusts the savings values of measures throughout the year. Each year, PSE tracks the RTF revisions as program staff set their upcoming biennial savings target and natural gas goal.

The savings targets are typically established in July of a planning year, consistent with requirements, using (where applicable) the RTF UES values in place at that time. Program staff have an opportunity to make final adjustment to RTF UES measures employed at the end

[13] WAC 480-109-110(3) requires utilities to provide their advisory groups with a draft conservation filing 30 days in advance of the filing. This requirement significantly compresses the planning process. Thus, the time to lock measure savings values is moved up a month.

[14] In cases where PSE pursues the conversion of a measure from RTF UES to PSE Deemed, the measure cannot be used until the evaluation, engineering analysis, or actual usage studies are completed and approved. This affects PSE's ability to meet its savings targets and goals.

[15] The current RTF designation for prescriptive measures is UES: Unit Energy Savings.

of August of the planning year. When the RTF adjusts UES values after PSE locks the target on September 1, it will adjust the savings reported in the year following the next program year.

## 3. Selection of RTF Measures

The use of every RTF measure is administratively unrealistic. PSE employs only those RTF measures that it can accurately track, meet cost-effectiveness expectations,[16] achieve a sustainable customer demand, are supported by contractors and trade allies, and lend themselves to effective verification. PSE evaluates the potential impact of these measures, regularly reviewing those that can be offered to customers and effectively managed. However, there are far more measures in the RTF database than can be effectively managed or accounted for with a high degree of accuracy within a program's suite of offerings.

## 4. Implementing RTF Measures

To ensure the highest degree of accuracy and mitigate the risk of potential disallowances and potential resultant penalties, PSE's follows a systematic strategy for implementing RTF UES measures:

- Selecting as many RTF measures that can be implemented, tracked and accurately reported as possible,
- Regular review of RTF measure tables for potential offering inclusion,
- Participation in RTF meetings to ensure that PSE program staff are engaged in measure development and planning,
- Actively managing all tracking and reporting data, systems and databases to ensure accuracy,
- Implement measure revisions at the beginning of each year, consistent with PSE's *Measure Revision Guidelines, and*
- Adopt suitable new RTF measures throughout the year, compatible with adaptive continuous improvement principles.

Energy Efficiency's comprehensive list of all prescriptive measures—RTF UES and PSE UES—is Exhibit 4: *Prescriptive Measure Tables*. Because Exhibit 4 is intended to be a list of all measures currently available, PSE will provide the 2022-2023 Exhibit 4 to the CRAG as a part of its Annual Reports. Until then, planned prescriptive measure UES values are available in each program's detail page of Exhibit 1: *Savings and Budgets*.

[16] Although the RTF indicates expected cost-effectiveness in the measure table of a particular measure's workbook, PSE delivery methods, incentive levels, regional differences, etc. may change the final actual cost effectiveness.

# Exhibit Summary

This section provides a brief overview of the contents of each Exhibit included with the 2022-2023 Biennial Conservation Plan.

## Exhibit i: 10-year Conservation Potential & Biennial Conservation Acquisition Targets

The 2022-2031 Ten-year Achievable Conservation Potential and 2022-2023 Biennial Conservation Targets Exhibit discusses the development of the electric ten-year achievable conservation potential and two-year conservation target.[17] Exhibit i may be referenced as "The Ten-year Potential and Two-year Target", "Two-year Target", or "2022-2023 Biennial Target". Each designation has the same meaning for purposes of referencing the development of the electric 2022-2031 Ten-year Achievable Conservation Potential and 2022-2023 Biennial Conservation Targets.

Exhibit i provides an overview of PSE's Integrated Resource Plan (IRP) guidance and Conservation Potential Assessment (CPA) development processes, which satisfy the requirements of WAC 480-109-100(1)(a)(i), (2) and (3). The Exhibit also notes the extent of public participation in the development of the 10-year potential and 2-year target, as prescribed by WAC 480-109-120(1) sub-section (b)(ii). Another sub-section addressed in Exhibit i is (b)(v), which requires that a utility provides a description of and support for any changes from the assumptions or methodologies used in the utility's most recent conservation potential assessment.

PSE reviewed the majority of the ten-year potential and two-year target development points with the CRAG throughout the latter half of 2021. A key requirement met in these meetings is condition (3)(c) which required PSE to engage the CRAG in the scope and design of the 10-year conservation potential analysis and to identify the achievable conservation potential for 2022-2031. Additionally, many CRAG members also participated in the Integrated Resource Planning Advisory Group (IRPAG) meetings between 2020 and 2021.

## Exhibit 1: Saving Goals & Anticipated Expenditures

Exhibit 1: *Savings and Budgets* represents a detailed view of every Energy Efficiency program; PSE provides a separate view for the programs' electric and natural gas area. Each program detail page rolls up to a Sector view, which sums the budget categories ("Labor", "Overhead", "Employee Expense", etc.). In the Sector views, there are separate electric and natural gas pages for each year of the biennium. Finally, the Sector views roll up to the Portfolio views. PSE presents each Sector and Portfolio view in a two-year, and separate 2022 and 2023 views. This presentation is also consistent with condition (4)(a), providing separate, annual budget and conservation target views.

The format of Exhibit 1 remains unchanged from the previous four biennia, providing a high degree of consistency for Stakeholders. In keeping with its adaptive management principles, it is PSE's

[17] This document only discusses electric conservation.

intention to enhance the presentation of the budget and measure details with each iteration. PSE takes into account development and reporting efficiencies of PSE staff, with a keen eye towards Stakeholder needs, requests, and observations.

## Exhibit 2: Cost-Effectiveness Estimates

Exhibit 2 provides program-level cost-effectiveness figures, as well as electric and natural gas-specific program calculation pages.

## Exhibit 3: Program Details

Discussions of program-level strategies and tactics are located in Exhibit 3: *Program Details*. It is notable that PSE maintains a running version control number (for instance, "**version**: two **replacing version**: one") in the footer section of Exhibit 3. This version numbering practice commenced with the 2011 Annual Conservation Plan filing.

Each program that generates conservation savings[18] contains an overview of program elements, including the:

- Purpose of the program,
- Program description,
- Delivery method,
- Implementation management,
- An overview of customer incentives, including electric and natural gas measure tables, consisting of a description, eligibility, and rebate amount,
- The program's target market,
- The marketing plan,[19] and
- Outreach plan.

Programs, functions, and activities in the Portfolio Support, Research & Compliance, and Other Electric Programs Sectors also provide a Purpose and Program Description discussion.

[18] Programs or functions such as Evaluation or Conservation Supply Curves do not generate savings and for the most part, do not interface with PSE customers. Therefore, program elements such as *Customer Incentives* and *Target Market* do not apply to these.

[19] A summary discussion of the Energy Efficiency Marketing Plan can be found in Chapter 2: Support and Planning under *Customer Engagement*. PSE provides detailed marketing plans by program in Exhibit 3: *Program Details*.

## Exhibit 4: Prescriptive Measures

Energy Efficiency's comprehensive list of all prescriptive measures—RTF UES and PSE Deemed—is Exhibit 4: *Prescriptive Measure Tables*. Energy Efficiency's Measure Revision Guidelines require that the Director, Energy Efficiency, approve all measure revisions (either updated savings values or new measures). These measures are then archived in PSE's DSMc system for access and savings reporting.

Accordingly, 2022 measure values aren't archived in DSMc by the time that the 2022-2023 BCP is filed in November 2021. PSE will provide the 2022 Exhibit 4 to the CRAG when it updates the first quarter 2022 filing of Exhibit 3: *Program Details*. Until then, planned prescriptive measure UES values are available for review in each program's detail page of Exhibit 1: *Savings and Budgets*.

It is important to note that when PSE develops and files its conservation plans, not all UES measures have been updated by the RTF, or are in the process of being updated at the time that PSE is required to file the BCP.[20]

PSE will make any necessary adjustments to align the savings values with RTF UES values at the beginning of 2023, if the RTF values are published after September 1, 2021, consistent with PSE's *Measure Revision Guidelines*.

## Exhibit 5: NEEA Planned Activities

NEEA plans and reports are standalone documents, comprising Exhibit 5. Treating this document in this manner reflects the significant effort expended by NEEA Staff to create these references for inclusion in PSE filings. NEEA savings targets are included as Supplement 1 to Exhibit 5.

## Exhibit 6: Evaluation Plan

Exhibit 6 provides a view of all efficiency program evaluations and the strategy that Energy Efficiency Evaluation staff will use to implement the evaluations in the most effective manner, over a four-year cycle, along with the guiding principles of the Evaluation team.

The EM&V Framework is included as Supplement 1 to Exhibit 6 and provides discussions on how PSE will conduct evaluation, measurement, and verification activities to estimate savings and other metrics associated with its Energy Efficiency department programs.

[20] In order to comply with the requirement of WAC 480-109-110(3), which requires PSE to provide the CRAG a draft BCP filing 30 days in advance of the filing, the Measure Revision Guidelines were adjusted so that henceforth, PSE will employ RTF UES values or PSE Deemed values that are effective on September 1 of each planning year.

## Exhibit 7: Requirements Compliance Checklist

Exhibit 7 is excluded from PSE's planning documents, as the Requirements Compliance Checklist is a backward-looking document, which is more applicable to PSE's Annual Reports of Energy Conservation Accomplishments.

## Exhibit 8: Tariff Revisions

PSE created Exhibit 8 to provide the CRAG with mark-up versions of the Conservation Schedule tariff sheets that PSE plans to file and request Commission approval, contemporaneously with the 2022-2023 BCP. PSE will request that the revised Tariff Sheets be made effective on January 1, 2022.

It is important to note that in the tariff filing process, only those Tariff Sheets being revised are filed, rather than the entire Schedule or complete set of Conservation Schedules. As a courtesy to readers, though, PSE includes a PDF of the entire (current, non-revised) Schedule for easier reference in Exhibit 8, with the revisions noted in mark-up Microsoft Word versions.

# Glossary

This section provides descriptions of commonly-used Energy Efficiency terms and acronyms.

## Commonly-Used Terms

| Term | Definition |
|---|---|
| **Calculated Savings** | This savings type is different from deemed values (described below). This term indicates that there is a pre-approved, stipulated input savings value (or cost) per measure. This value (or cost) is then multiplied by site-specific input values to arrive at the overall savings value (or cost). |
| **Conditions** | Specific deliverables and stipulations with which the Company must adhere through the course of operating and managing energy efficiency programs. In addition to compliance requirements outlined in the Settlement Terms Sections A through J and L in Docket No. 100177, 2018-2019 conditions are listed in Appendix A of Order 01 in Docket UE-171087. Conditions are typically included in Commission Orders approving PSE's biennial conservation targets. |
| **Custom Savings** | This savings type applies to conservation projects where a PSE EME performs specific evaluation and review of a unique customer site to determine savings values—therms or kWh—that apply only for that site. For this type of measure, there is insufficient information, the occurrence is too infrequent, or it cannot be specifically defined to justify development of a Calculated or Deemed protocol. |
| **Deemed Measure** | As in a measure's deemed savings value; a savings (or cost) value that applies to a unit of specific measure, regardless of where or how the measure is installed. Measures for which it is possible to "deem" per-unit energy savings, cost, and load shape based on program evaluation data and engineering estimates. (For instance, one residential interior CFL lamp may have a deemed value of 24 kilowatt-hours per year.) This classification applies to both RTF and PSE Deemed (noted on the following page). This term has been supplanted by "UES", defined below. |
| **Direct Benefit to Customer (DBtC)** | A PSE-specific term, indicating rebates, grants, credits or services that are of value to customers. Services can include, but aren't limited to, credits on a monthly bill, upstream incentive provided to channel partners or trade allies—either within the PSE service territory or regionally—and free energy efficient devices available by mail. |
| **Direct-Install Measure** | A conservation measure that is installed by a PSE representative—rather than a PSE customer—into a qualifying structure. |
| **Distribution** | For the purposes of Schedule 292, means electrical facilities within the State of Washington that the Company owns or operates to convey electricity from the point of generation or purchase to the point of use by a Customer. Distribution includes transmission and distribution lines related substations and transformers. |
| **EIA** | Energy Independence Act. A reference to the 2006 voter initiative, The Washington Clean Energy Initiative. The vote resulted in the creation of RCW 19.285 and WAC 480-109, which is now referred to as the Energy Independence Act. The EIA was also sometimes colloquially referred to as "I-937". |
| **Measure** | A product, device, piece of equipment, system or building design or operational practice used to achieve greater energy efficiency or to promote Fuel Conversion and Fuel Switching. Unless specifically enumerated in a |

| | |
|---|---|
| | specific Energy Efficiency Program, all Measures, proposed by Customers or otherwise, shall meet or exceed the efficiency standards set forth in the applicable energy codes, or, where none exists, "standard industry practice" as determined by the Company. Measures will meet common construction practices, and meet industry standards for quality and energy efficiency.[21] Measures should also meet cost-effectiveness standards. |
| **Orders (see also Conditions)** | Overarching instructions to an entity under the purview of the Washington Utilities and Transportation Commission (UTC or Commission). Orders may be made at the conclusion of a Docket proceeding or throughout the course of a Docket's existence. At the time of the publication of this BCP, PSE is operating under Order 01 of Docket UE-171087, along with other Orders in various Settlement Stipulations or Agreements. |
| **Program** | Programs may consist of a single measure, an assortment of related measures or a suite of measures that are related strictly by delivery type or customer segment. |
| **PSE Deemed** | Relative to measure savings types (Custom, Calculated, PSE Deemed or RTF Deemed), these measures are supported by PSE engineering calculations or evaluation studies, in compliance with WAC 480-109-100(5). |
| **RTF Deemed (see also UES)** | A legacy term, only used in the Source of Savings database. Relative to PSE savings types (Custom, Calculated, PSE Deemed or RTF Deemed), supported by RTF analyses, in compliance with WAC 480-109-100(5). |
| **Savings** | Savings (both natural gas and electric) are defined and reported as those recognized in the first year of a measure's total expected life. PSE reports the total savings for the year that the measure was implemented, regardless of when it is installed. Electric savings are counted at the customer meter, not the busbar. Gas savings are counted at the customer natural gas meter.<br><br>It is important to note that all measures have an associated life, during which the noted annual savings accumulate. Each measure has a different life, as determined by rigorous evaluation. The average measure life per program can be found in the Energy Efficiency Cost-Effectiveness tables in Exhibit 2 of this report. As noted above, measures have associated savings beyond the first year; those savings continue to accrue to the benefit of PSE. |
| **System** | In this document, System may have the following meanings:<br><br>1) Any software program—supported by PSE's IT department or otherwise—or physical apparatus used to record, track, compile, report, archive, audit energy savings claims or financial data.<br><br>Electrical, and/or natural gas equipment that is either attached together or works in concert to provide space conditioning, plumbing functions or other end-uses associated with structures, such as HVAC systems, pumping systems, etc. |

[21] Schedule 83, section 4, Definitions, #m. Schedule 183, section 4, #l.

## Savings Terminology

| Terms | Definition |
|---|---|
| **CPA Pro-Rata Share** | Pro-rata share of the utilities IRP's Conservation Potential Assessment's 10-year potential. Includes NEEA. |
| **EIA Target** | Equals the CPA Pro-Rata Share, applicable to electric savings |
| **Decoupling Threshold** | [EIA Target (electric) CPA Pro-Rata Share (gas) * 0.05] |
| **Total Utility Conservation Goal/Achievement** | All savings programs funded by Conservation Riders<br>[EIA Target + Pilots + NEEA + 449/Special Contracts + Decoupling Threshold] |
| **Adjusted Programs** | Programs approved by the Commission to be excluded from a Penalty Threshold. For last three biennia, these included NEEA and Pilots with Uncertain Savings. |
| **Utility-Specific Conservation Goal/Achievement** | [Total Utility Conservation Goal/Achievement – (Excluded programs (for instance, NEEA, Pilots with uncertain savings, retail wheeling accounts, etc.) + adjustments)] |
| **EIA Penalty Threshold** | [Utility-Specific Conservation - Decoupling Threshold] |
| **Excess Savings for Carbon (Dept of Commerce driven)** | (Referencing results, rather than targets)<br>The difference of [Total Utility-Conservation Achievement – Total Utility Conservation Goal] |
| **PSE Excess Savings for Penalty Thresholds (UTC Driven)** | (Referencing results, rather than targets)<br>The difference of [(Total Utility-Specific Conservation Achievement) - (EIA Penalty Threshold + Decoupling Penalty Threshold)] |

## Acronyms

| Acronym | Definition |
|---|---|
| **ACP** | Annual Conservation Plan |
| **aMW** | Average MegaWatt. An expression of energy (versus "power"). It is used to express very large amounts of energy. The term represents an average of power (Megawatts [MW]) used over time (the standard term being one year or 8,760 hours). Thus, 1 aMW = 8,760 MWh. |
| **BCP** | Biennial Conservation Plan |
| **BEM** | Business Energy Management |
| **BOMA** | Building Owner and Managers Association |
| **CFL** | Compact Fluorescent Lamp |
| **C/I** | Commercial/Industrial. References programs in the Business Energy Management sector. |
| **CRAG** | Conservation Resource Advisory Group |
| **DSMc** | Demand Side Management central. A comprehensive project management system, developed and maintained by Nexant. |
| **EES** | Energy Efficiency Services; a PSE legacy acronym that is still associated with some tracking and reporting systems and databases, referencing Energy Efficiency's former name. (Eliminating this reference would cause severe disruption of queries and reports in some systems and filing structures.) |
| **EE** | Energy Efficiency |
| **EME** | Energy Management Engineer |
| **EM&V** | Evaluation, Measurement and Verification |
| **HVAC** | Heating, Ventilation and Air Conditioning |
| **IRP** | Integrated Resource Plan |
| **IRPAG** | Integrated Resource Planning Advisory Group |
| **kWh** | Kilowatt Hour. 1,000 watt-hours = 1 kWh, which is equivalent to 10 100-watt incandescent lamps being turned on for one hour. |
| **LED** | Light Emitting Diode (typically, a lamp type) |
| **MWh** | Megawatt-hour. 1,000 kWh = 1 MWh |
| **NEIs** | Non-Energy Impact, Quantifiable. Formerly known as Non-Energy Benefit, or NEB. Attributes having a direct cost-effectiveness correlation applicable to the Total Resource Cost test. It is important to note that any reference to NEIs in any PSE document refers to those that are quantifiable. Any non-quantifiable benefits will be specifically noted. |
| **NEEA** | Northwest Energy Efficiency Alliance |
| **RCW** | Revised Code of Washington. |
| **REM** | Residential Energy Management |
| **RTF** | Regional Technical Forum, an advisory committee and a part of the Northwest Power and Conservation Council. The RTF develops standardized protocols for verifying and evaluating conservation. |

| | |
|---|---|
| **SBDI** | Small Business Direct Install (program within the BEM Sector, Commercial Rebates). |
| **TRC** | Total Resource Cost. The cost to the customer and/or other party costs to install or have installed approved Measures plus Utility Costs and minus Quantifiable Benefits (or Costs). |
| **UC** | Utility Cost: The Company's costs of administering programs included, but not limited to, costs associated with incentives, audits, analysis, technical review and funding specific to the Measure or program and evaluation. |
| **UES** | Unit Energy Savings. Formerly "Deemed", the RTF updated the term in 2011. |
| **WAC** | Washington Administrative Code |
| **WUTC, or UTC** | Washington Utilities and Transportation Commission |

# Conclusion

This concludes Energy Efficiency's Overview of its 2022-2023 Biennial Conservation Plan. The following Exhibits i through 8 provide an extensive amount of detailed information about how PSE will execute the concepts and initiatives described herein.

Consistent with WAC 480-109-120(1)(b)(i), PSE requests that the Commission approve its ten-year conservation potential and biennial conservation target. PSE acknowledges, and is very appreciative of the partnership with the CRAG and the collaboration that was cultivated with CRAG members throughout 2021. PSE looks forward to further success in 2022-2023.

PSE additionally appreciates the input and cooperation of its regional partners, other PSE divisions, and its constituents. As it progresses through the upcoming biennium, PSE will continue to keep its Stakeholders apprised of progress, program refinements, measure updates, and other adjustments as PSE utilizes its business management acumen to anticipate and stay ahead of regional conditions in moving towards achievement of its 2022-2023 biennial savings targets.

Most importantly, PSE extends its thanks to its customers. PSE sincerely appreciates their acknowledgement of its efforts and trust that they put in the dedicated people of Energy Efficiency. It is a steward of their efficiency efforts and funding. PSE takes its obligation to prudently use the funds that they provide and improve the environment for them and their children with the utmost respect and sincerity. PSE consistently strives to provide the highest level of customer service in the Northwest.

The Energy Efficiency Staff look forward to a productive and constructive 2022-2023!

Respectfully submitted,

*Puget Sound Energy*
*Energy Efficiency*