

Exhibit 3

2018-2019 Program Details



Ē EnergyEfficiency



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I. INTRODUCTION

Exhibit 3: Program Details provides discussion about PSE's Energy Efficiency department conservation programs, functions and activities, including those that do not have an associated Conservation Schedule. Exhibit 3 accompanies PSE's Annual And Biennial Conservation Plans, and is continually updated at appropriate intervals throughout the year. The contents of Exhibit 3 are developed to be consistent with applicable sections of WAC 480-109, the conditions outlined in Appendix A of Order 01 in Docket UE-152058, and sections A through J and L of the 2010 Electric Settlement Agreement in Docket UE-100177. These include, but are not limited to:

- WAC 480-109-110(1)(a) Discussion of programs and measures,
- WAC 480-109-110(1)(i)(1) Discussion of efficiency marketing efforts,
- WAC 480-109-110(1)(i)(2) Discussion of Incentives,
- Condition (5) Program Details filings.

Exhibit 3 program details also include natural gas program discussions. This is consistent with the requirements outlined in Exhibit F of the 2002 General Rate Case Settlement, Docket UG-011571.

A. Associated Documents

As a part of its 2018-2019 Biennial Conservation Plan (BCP) filing, PSE includes several documents associated with Exhibit 3. It is noteworthy that Exhibit 3 may be updated and filed, consistent with condition (5) when there are major program updates. Additional documents, updated for 2018, included with the BCP are:

Savings and budgets (both electric and natural gas) order number details	Exhibit 1
Cost Effectiveness Calculation Tables	Exhibit 2
List of Measures, Incentives and Eligibility	Exhibit 4
Northwest Energy Efficiency Alliance (NEEA) Plan	Exhibit 10



B. Program Details

Following each program's title is the corresponding Conservation Schedule number. A number preceded by an "E" indicates that this is an electric Schedule. Similarly, a number preceded by a "G" indicates that this is a natural gas Schedule. All conservation programs have the same Conservation Schedule number for both natural gas and electric service.

1. Program Detail Revisions

As has been its standard business management practice, consistent with adaptive management principles, PSE makes adjustments to its conservation offerings, delivery methods, marketing, incentives, and other elements of its programs on a periodic basis. This ensures that PSE anticipates and adapts to customer demand, market trends, and is positioned to achieve aggressive conservation savings targets. Consistent with WAC 480-109-110(3), the Conservation Resource Advisory Group ("CRAG") was presented with draft copies of Exhibit 3: Program Details on September 29, 2017, prior to the filing of the final draft with the Washington Utilities and Transportation Commission ("UTC" or "Commission") on November 1, 2017.

Following this filing, any subsequent filings will be provided to the CRAG in their "mark-up" version prior to UTC filings, per condition (5).

2. Program Details Organization

The organization of program detail discussions aligns with that of Exhibit 1: Savings and Budgets.¹ This facilitates easy reference from a program's budget to its description, marketing plan, incentive offerings, etc.



¹ One exception is in the Residential Energy Management's Residential Business-to-Business Channel, as discussed in the REM introduction.



C. Document Contents

All program details within this Exhibit were updated to reflect the most accurate representation of their planned 2018 offerings and services. Most Program Details² contain the program's:

- Purpose,
- Description,
- Customer Experience,
- Target Market,
- Customer Incentives, and
- Marketing and Outreach Plan.

² Residential Energy Management and Business Energy Management sectors only. Portfolio Support and Research & Compliance functions and Other Electric Programs may exclude *Target Market*, *Customer Incentives* or *Marketing Plan* sections.





II. RESIDENTIAL ENERGY MANAGEMENT





A. Low Income Weatherization

Schedules E/G 201

The Low Income Weatherization program is included in the Residential Business-to-Business Channel. This is primarily because the majority of customer-facing contact for this organization is through low-income agencies throughout the PSE territory. The program discussion is presented here to maintain the numerical sequence of the Conservation Schedules, as also presented in *Exhibit 1: Savings and Budgets*. The remainder of the Residential Business-to-Business programs (Multifamily Retrofit and Residential New Construction) are discussed on page 29.

1. Purpose

The Low Income Weatherization program assists low-income residential customers to improve the energy efficiency of single family residences, multifamily structures and manufactured/mobile homes.

In 2018-2019, the goal of Puget Sound Energy's Low-Income Weatherization Program will be to continue to lessen the energy-cost burden of lower-income customers by improving the energy efficiency of their residences and educating these consumers on routine ways to reduce their energy use and costs.

Program efforts will build on the existing model and extend the partnerships with assistance agencies as well as leverage other PSE programs for lower-income customers to include safety awareness and bill-payment assistance. The program will distribute dollars collected from the Microsoft Special Contract dollars, to expand access to cost-effective energy efficiency services and renewable energy technologies for PSE's low-income electric customers.

2. Description

Key stakeholders are low-income natural gas and electric customers; county and municipal low-income weatherization agencies in the PSE service area, Washington State Department of Commerce ("Department of Commerce" or "Commerce"), and participating weatherization contractors and suppliers.

For those projects receiving PSE funding combined with other State and Federal funding, income eligibility is determined in accordance with Department of Commerce Policies and Procedures.



Residential Low Income Weatherization provides funding of many cost-effective home weatherization Measures for low-income customers receiving natural gas and/or electric heat from PSE.

Funds are used for single-family, multi-family and mobile home residences. Some Measures which do not meet standard cost-effectiveness tests may also be approved. Measures funded may include conservation measures that are cost effective consistent with the *Weatherization Manual* and those measures identified through the priority matrix in the *Weatherization Manual*.

In addition, this program provides funding for energy-related repairs and energy education. An energy-related repair is a repair that is necessary (1) to install a weatherization measure properly, (2) to protect the health and/or safety of the occupants, (3) to address an existing problem that weatherization could aggravate or (4) to protect the integrity of the installed measure. Examples include but are not limited to:

- Repair roof leaks,
- Electrical inspection and repairs,
- Mold/mildew remediation,
- Rodent, insect and pest extermination,
- Bath and kitchen ventilation upgrades, and
- Furnace or water heater repairs or replacement.

Sources of Low Income Weatherization funding include, but are not limited to, Conservation Rider, Company funds, BPA credits, special contracts, or other federal or state government programs.

For those funds that must meet a cost effectiveness standard, up to 30 percent may be applied to energy-related repairs or to pay the balance of an energy efficiency measure that are necessary to effect the installation of cost-effective measures. The final percentage allocated will be determined according to the overall program cost-effectiveness.

a. Special Contract Funding

Per stipulations outlined in the special contract between Microsoft and PSE and approved by the Commission, established as a part of the Settlement Agreement in Docket UE-161123, PSE estimates that the LIW program will manage up to approximately \$145,000 annually for energy efficiency projects, emerging technology, distributed generation, or repairs necessary to install energy-efficiency measures.





3. The Customer Experience

During the 2018/19 Biennium, the Program will strive to enhance the customer experience by providing customers options for assistance and make it easy to do business through the Program. To that end, the Program will continue to work more closely with the PSE Energy Assistance Program on outreach and communication strategies, using merged collateral, and sharing program information. In addition, the Program will continue to participate in Get to Zero initiatives for Energy Assistance to create, enhance, and improve the channels through which PSE interacts with its customers: web, mobile, social media, call center, field mobility tools and outbound predictive notifications.

Beyond this effort, the Program will be particularly focused on identifying and leveraging other enhanced integration opportunities across PSE's Assistance and Energy Efficiency programs and for increasing contractor participation in the Program.

4. Opportunities for Program Awareness

Through the use of segmentation tools, PSE will strive to provide more customized outreach to populations in need. In particular, PSE intends to launch a multicultural campaign targeting Spanish speakers, the predominant second language amongst PSE customers, to develop and deliver paid and earned media to build program awareness and generate interest in PSE program participation. The lessons learned from this effort may be transferrable to other spoken languages and marketing and outreach initiatives.

5. Customer Incentives Overview

a. All Structures

Funding for measures and customer eligibility are outlined in PSE's conservation Tariffs. Funding is disbursed to local agencies. Payments are based on incentives for measures installed. Local agencies are permitted fixed percentages for administrative costs under the existing tariff.

Under the Matchmaker Agreement with Department of Commerce, PSE's lowincome Tariff-based funding may be combined to support a "whole house" approach for structures.



Applicable Low Income measure category headings include, but are not limited to:

- Building envelope Improvements,
- Heating system upgrades,
- Water heating upgrades,
- Lighting upgrades,
- Appliance replacement, and
- Common area upgrades.

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests including those employed in the *Weatherization Manual*, structure type and its location within the PSE service territory, fuel type (natural gas or electric), product type and product quantity. A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included in this Biennial Conservation Plan as Exhibit 4.

b. Retrofit-- Multi-Family

Prescriptive incentives will be applied to measures installed within units of multifamily residences. In addition to this, calculated commercial measures or measures that are cost effective consistent with the *Weatherization Manual* are made available for common area and residential unit measures. All calculated incentives will be evaluated using currently accepted PSE commercial engineering calculations or methods consistent with the *Weatherization Manual*.

6. Target Market

Low-income customers including owners and tenants of single family, multi-family, manufactured or mobile homes that meet federal poverty guidelines issued by The Washington State Department of Commerce and natural gas and/or electricity from PSE. Low Income agencies are contracted with PSE to perform customer income eligibility, manage the installation, and track and report projects to PSE.

7. Marketing and Outreach Plan

The Low Income Weatherization program is a highly prescribed program that relies on its partner housing agencies to deliver its offerings to eligible low-income homeowner participants. The primary marketing objective is to elevate program awareness to participating customers and increase end-user participation through key housing agencies' administrators.





In 2018-2019 a program enhancement will be to target outreach efforts to the historically underserved and hard-to-reach customers in the income-eligible Hispanic community. The lessons PSE can learn in how best to communicate with and recruit participation in this customer segment can inform expanded outreach to other hard-to-reach customer segments going forward.

PSE will continue to leverage and extend existing partnerships with community action agencies. Where appropriate, PSE will seek public venues to advocate on behalf of lower-income energy customers. In addition, the program manager will advise the Energy Efficiency Communities and Marketing teams on outreach strategies, potential community partners, and communications channels to promote PSE's energy efficiency programs and bill payment assistance services to eligible customers. The goal in this work is to provide assistance to PSE's struggling customers, raise awareness of PSE energy efficiency programs, and enhance PSE's corporate social responsibility reputation.

Low-income Program Awareness Tactics

Maintaining consistent general program messages in broad marketing materials and continuing to target specific, localized outreach efforts with the customer segmentation tool will be critical components in achieving 2018-2019 savings target goals. With this data-driven approach to supplementing community action agency outreach, PSE marketing and outreach tools can maximize awareness of the LIW program in areas that are most likely to include income-eligible customers. Some of PSE's key communication channels to elevate customer awareness and participation in PSE low-income assistance programs might include:

- Weatherization Assistance/HELP joint brochure (multiple languages)
- Landlord program awareness brochure
- Targeted direct mail pieces
- Paid and earned media placements
- Optimizing PSE and agency partner web pages
- Posters
- Booth and tabletop display or pull up banner
- PSE outreach efforts with local social service agencies, municipal jurisdictions, school districts, and chambers of commerce
- Media placements in cultural/language specific media channels
- Participation in National and local Weatherization Days
- Social media content and advertisements
- PSE and agency press releases
- YouTube/PSE channel videos



- Multi-Family energy fairs
- Tabling at community events
- Presentations to customer groups
- Internal PSE trainings/presentations
- Annual forum
- Participation and awareness measurement surveys
- Leave behind collateral and signage
- Speak at conferences and events

Any PSE-supplemented community partnerships or marketing promotions will be done in close coordination with the program manager and local agencies. Low Income Customer Energy Efficiency program awareness campaigns may include, but will not be limited to:

- Co-tabling with local agencies- LIW/Energy Assistance at locales such as:
 - o Food Banks
 - Social service events
- Provide cross channel promotional opportunities:
 - o Direct mail to segmented customer base
- Host internal employee informational sessions:
 - Host internal employee education sessions at local PSE offices and/or within Bellevue/Bothell based departments to build program awareness
- Educational displays:
 - Posters or infographics explaining the B2B Channel services
 - Outreach to local pay stations requesting to host educational displays

a. Partner Marketing with Housing Agencies

The key strategy will be to continue to encourage Housing Agency Administrators to move applications swiftly and smoothly through the approval process, and to identify LIW opportunities to eligible candidates.

This will require a communications program that delivers the current information to them about LIW feature and benefits as well as technical program provisions. There will also be effort to passively deliver collateral through this channel on other single family residential offerings and energy efficiency tips that could be helpful to candidates on the waiting list.

This effort must also allow for peer recognition and results accomplishment to motivate administrators to push program opportunity whenever suitable.





PSE may pursue strategies that include:

- Annual forum,
- Thank you postcards,
- Overview of measures postcard,
- Participation and awareness measurement surveys,
- A-frame PSE and agency co-branded community awareness signs,
- Leave behind collateral,
- Co-branded or PSE logo on agency collateral, ads and awareness tools,
- Optimizing web page,
- Increased collaboration among other low-income programs and services,
- Continuous review and effectiveness assessment.



B. Single Family Existing

Schedules E/G 214

1. Purpose

The Single Family Existing program acquires cost-effective energy savings from existing single-family (less than or equal to four units on a parcel) retrofit measures and services.

2. Description

Single Family Existing programs implement cost effective, targeted, residential energy savings using a menu of prescriptive and calculated efficiency measure incentives, including rebates for single family existing structures. Existing single family structures are defined as residential dwellings which include; structures with four or less units that are attached by a contiguous roofline, manufactured or factory built homes permanently affixed to a concrete foundation, and manufactured or factory built homes that are transportable. Single family existing residences exclude structures that are currently under construction. Prescriptive rebates are intended to facilitate participation by customers, tenants (who have obtained property owner consent), contractors, manufacturers, retailers, developers, trade allies, and provide administrative efficiencies for PSE in meeting energy efficiency goals.

Single Family Existing programs are managed in the Direct-to-Consumer (D2C) and Dealer Channels.

Note: Multifamily campuses which have a mixture of existing residential building types, including buildings with four attached residential units or less, are served under the Multi-Family Retrofit Program; schedules E217 & G217.

3. Customer Incentives

Rebates and incentives offered to eligible natural gas and/or electric PSE Single Family Existing customers include a variety of end-use classifications, not limited to:

 Light-Emitting Diode (LED) lighting including A-line, BR-30, indoor fixture, MR-16, and candelabra.





- Consumer Electronics, through PSE's partnership with NEEA and the Regional Product Portfolio, such as sound bars and other efficient products PSE recommends but does not directly incentivize.
- Appliances—including refrigerators, dryers, clothes washers, heat pump dryers, and through PSE's partnership with NEEA.
- Retail, online, leave-behind, and engagement LEDs and showerheads.
- Refrigerator and Freezer Decommissioning both secondary and primary units.
- Weatherization, including windows, insulation air and duct sealing.
- Space heating including hydronic systems, high efficiency furnaces, high efficiency boilers, high efficiency fireplaces, heat pumps, and system controls, such as web-enabled thermostats.
- Water heating, including tank water heaters, heat pump water heaters, and efficient showerheads.

Incentive amounts and savings values are regularly reviewed and are based on regionally accepted energy savings estimates and incremental efficiency measure cost. Incentives may be subject to change in response to revisions in savings estimates, average incremental cost, market conditions, or changes in Federal appliance efficiency standards or State codes.





C. Direct-to-Consumer Channel

The Direct-to-Consumer Channel manages several programs-most of which are consumer-oriented-this includes, but is not limited to; refrigerator decommissioning, showerheads, appliances, electronics, and of course, energy efficient lighting. The Channel focuses on services targeted to a wide variety of retail and manufacturer online and entities. which includes PSE's own online store. shopPSE (https://shop.pse.com/). This Channel also collaborates on consumer electronics and select appliances through PSE's funding relationship with NEEA. The Direct-to-Consumer Channel operates primarily within the structure of Schedule 214; Single Family Existing.

1. Description: Residential Direct-to-Consumer Programs

These programs collaborate with retailers and manufacturers of energy efficient products – such as lamps, light fixtures, showerheads, electronics, and appliances such as, but not limited to, clothes washers, refrigerators, and electric dryers – to ensure that customers have access to a wide variety of efficient product options. The Direct-to-Consumer Programs provides incentives and promotions for efficient products to PSE's residential customers through agreements with retailers and/or manufacturers

When advantageous to do so, PSE may purchase energy-efficiency products directly from manufacturers or distributors to resale to customers or provide to retailers for resale. This may occur at either traditional or online stores, including shopPSE. PSE also provides field services to educate retail employees on its products, detail qualifying product, and ensure compliance with PSE agreements.

Highlighted 2018-2019 Programs & Measures:

a. Lighting

As LED market prices decline, PSE has found that LEDs have eclipsed CFLs in the marketplace as the leading choice for affordable energy efficient residential lighting. The decline in LED market prices means that PSE can continue to decrease LED incentives while still maintaining the same level of funding toward education and marketing of LED technology to further increase adoption to the broader consumer base. Additionally, the decrease in CFL sales and the industry announcement that effective 2017 CFLs are no longer Energy Star certified influenced PSE's decision to end its CFL program on January 1, 2017.





PSE is adjusting its residential retail lighting program to reflect these changing market conditions. Forecasted sales quantities have been updated to reflect the trend PSE is seeing in stores. PSE updated savings values in 2017 using RTF methodology and PSE specific data. These adjustments allow PSE's residential retail lighting program to remain current with market trends and allow program staff to serve its customers with the same great service.

To drive process efficiencies and leverage existing market relationships, commercial lighting retail offerings are in the Direct to Consumer Channel through the Lighting To Go program. Lighting To Go will follow a similar programmatic format to residential retail lighting. More detailed program discussions are in the Business Energy Management section, Schedules E262.

b. Refrigerator & Freezer Decommissioning

This program provides customers with a means to safely dispose of their unwanted refrigerators and freezers while receiving an incentive for removing a potentially high-energy usage appliance from service. Decommissioning prevents the product from continued circulation in the secondhand marketplace and is applicable to primary and secondary units. The impact to the environment, by ensuring appliances are disposed of in an environmentally responsible way, is factored into the cost effectiveness of the program as non-energy benefits as quantified by the RTF.

c. Heat Pump Dryers

PSE first offered the measure in 2016-2017. Similar to other heat pump technology the hot, humid air is passed through a heat pump where the cold side condenses the water vapor into a drain pipe and the hot side reheats the air afterwards for re-use. Heat pump dryers can use up to 50 percent less energy required by traditional dryers.

In 2017, PSE partnered with NEEA and Whirlpool to promote the Heat Pump Dryer technology. PSE and Whirlpool offer incentives for purchasing the dryer, while NEEA works with retailers to obtain in store floor space for the model. PSE did see a significant increase in Heat Pump Dryer rebates redeemed as a result of the collaboration. PSE plans to continue to offer the measure in 2018-2019.

d. Clothes Washers, Electric Dryers, and Refrigerators

In 2016, PSE incentivized the tiers for clothes washers and refrigerators in an incremental structure; \$25 for Tier 1, \$50 for Tier 2, and \$75 for Tier 3.



Customer market data has indicated confusion with the rebate structure. As a result, PSE is offered a single rebate dollar amount on any appliance Energy Star® rated or above starting in 2017. Customer satisfaction scores improved as a result.

PSE continues to pursue an in-store rebate model for retail appliances, PSE is researching new approaches and will continue looking for ways to expedite the rebate process, encouraging customer adoption of energy efficient appliance technology. In 2017, PSE tested market acceptance of an electric Energy Star dryer rebate. The measure was well received and is planned to be a part of PSE's standard appliance rebate portfolio in 2018.

e. Home Energy Reports

Home Energy Reports are customized reports mailed directly to PSE customers that help each residential customer better understand their home electric and natural gas consumption, motivate them to conserve and provide targeted calls to action tailored to help each customer save money and improve energy efficiency.

The initial pilot, launched in the third quarter of 2008, included 40,000 combined natural gas and electric single family households. In 2018, the Home Energy Reports program will be expanded to accommodate the customer accounts that were a part of the report expansion pilot in the previous biennium. This is a result of the 2017 IRP including behavioral savings in its conservation potential study. With consultation from the CRAG, this program will continue through 2019.

f. Web-Enabled Thermostat

PSE's web enabled thermostat program will continue for 2019. Adjustments have been made to unit energy savings values and measure life to reflect new research on savings from these units. PSE continues to add new qualified manufacturers who meet its product functionality requirements and have the ability to verify customer connectivity.





g. Advanced Power Strips

An Infrared (IR) sensing advanced power strip is installed with a home entertainment system. This device disconnects power to all devices after a set period with no IR signal.

A 2017 third-party evaluation of Advanced Power Strips has estimated that the savings value is significantly lower than calculated by the Regional Technical Forum due to improper installation and lack of understanding by consumers around the measure. PSE plans to remove the measure from the Direct to Consumer portfolio in 2018 and focus on education efforts with a pilot-like effort focused on coached direct installs. The expectation is to improve customer understanding and acceptance of the measure leading to increased savings and reintroduction of the measure in the Direct to Consumer channel.

h. Showerheads

PSE offers instant incentives to customers through retail stores, targeted emails, engagement and through shopPSE. The RTF released new savings for showerhead measures in November of 2016. PSE utilized these numbers to adjust savings claims for the 2018-2019 program year.

i. Faucet Aerators

PSE continues to offer WaterSense® labeled faucets and faucet aerators to customers. 6 Delivery methods for this measure include, but are not limited to: online retail, brick and mortar retail, mail-by request, and leave behind.

A faucet aerator is found at the tip of an indoor water faucet. Aerators create a non-splashing stream, delivering a mixture of water and air. Because the aerator limits the water flow through a faucet, water use is reduced. The reduced water usage translates into reduced energy consumption when heating water.

2. Marketing and Outreach Plan

The Direct-to-Consumer Channel offers instant discounts and rebates on energyefficient lighting, appliances, smart thermostats, and water-saving products to residential customers via in-store and online retailers. By partnering with national/regional/local retailers and manufacturers, PSE can offer its residential customers an array of discounted energy-efficient product and appliance options as well as limited-time promotions to deliver solutions to help lower their energy use and save money on their bill.



The goal for the Direct-to-Consumer Channel's 2018-19 marketing and Outreach Plan is to reach a wide and diverse segmentation of customers, both existing and new, through unique and innovative advertising, retail, customer engagement and community outreach campaigns that build awareness of and drive participation in PSE's energy efficiency programs.

The Direct-to-Consumer Channel will strive to anticipate customers' needs and deliver to them the right energy efficiency solutions at the right time that help them use less energy and save more money. This will be achieved through the following more specific objectives:

- Customer awareness: Continually and regularly notify and alert customers via multiple channels that PSE has energy efficiency programs and rebates that can save them money.
- Market intelligence: Refine existing propensity models and utilize new customer segmentation technology and tools to deliver targeted marketing messages and offers.
- Strategic partnerships: Collaboration with retailers and manufacturers is key to increasing awareness of program offers and driving savings. Sponsorships with local sports franchises will help extend program reach and build brand credibility.
- **Savings**: Send motivated consumers to in-store or online retailers for product purchase, including instant discounts and limited time offers.
- Self-service tools: Design campaign and promotions utilizing online, selfservice tools that eliminate barriers to participation and streamline the rebates process.
- **Customer satisfaction**: Improve PSE's relationships with customers by offering first-rate offers and products and providing stellar service.
- Education: Help customers understand how PSE's myriad energy efficiency options can not only save them money, but also increase the comfort and improve the value of their homes.

The Direct-to-Consumer Channel will endeavor to accomplish its goal by focusing on the following strategies and tactics:

Advertising:

• Leverage brand awareness advertising campaign creative to promote energy efficiency programs and offers.





- Comprised of digital web banners and keyword search, programmatic advertising will be targeted to qualified customers who are in the market for energy-efficient lighting, appliances, showerheads, smart thermostats and other energy efficiency products.
- Individual program advertising campaigns to be planned and implemented according to relevant seasonality and feature category, contextual and audience/behavior targeting to optimize messaging and reach the right customers at the right time.
- Advertising campaigns will be delivered through a variety of different channels, including but not limited to: digital display, digital video, TV, radio, keyword search, paid social, out-of-home, transit.

Cross-channel campaigns:

- Collaboration with other Energy Efficiency channels and other relevant programs with a shared audience and similar goals on an integrated residential customer engagement campaign approach will be integral to increasing customer awareness and driving overall residential energy efficiency savings.
- A multi-channel integrated approach gives customers a comprehensive look at the full range of energy efficiency offerings.
- Cross-channel campaigns will be delivered through a variety of channels and tactics, including but not limited to: email, direct mail, social media, events, community outreach.

Retail-focused campaigns:

- Partner with retailers and manufacturers to further promote PSE's goal of reaching and engaging with more of its customers.
- Retail campaigns and promotions put PSE's messaging in front of customers at the point-of-purchase via custom packaging/labeling and in-store signage.
- Engaging with customers in-store through high-impact events will allow PSE to further educate customers on the benefits of energy efficiency and increase attribution to PSE.

Ongoing promotions:

- Refine point-of-purchase materials/custom packaging, both online and instore, to drive sales and increase attribution.
- Develop new and unique limited time offers to attract new and encourage repeat customers.
- Leverage PSE-owned channels to regularly promote Direct-to-Consumer promotions and limited time offers.



- Drive customers to purchase discounted energy-saving products from shopPSE, PSE's own online retail store.
- Drive customers via seasonal/usage notifications, email and advertising to access the online Energy Center for personalized tips and tools to use less energy and save more money.

Community outreach campaigns:

 Deliver community engagement and promotion of specific programs and campaigns targeted to high-priority communities identified through market intelligence and research.

The Direct-to-Consumer Channel will endeavor to accomplish its overall goal by focusing on specific strategies and tactics by program:

Retail Lighting

- Clear point-of-purchase materials/custom packaging (online and in store) that drive customers to purchase discounted LED bulbs and fixtures.
- Increase awareness of the variety and quality of LED products and technology on the market.
- Increase awareness that LED bulb discounts are attributed to PSE instant rebate.
- Include specific messaging in outreach presentations (city councils, chambers of commerce, homeowners associations, home shows, etc.) about the dynamic changes in the LED bulb market and how PSE has helped make this technology more widely available.
- Increase awareness that LED bulb pricing is more affordable than ever. Engage PSE's customers in-person and online with LED bulbs as an education entry into the most energy-efficient, long-lasting lighting on the market.
- Continue to educate customers both directly and through retail sales associates engaging them within the stores on the best energy efficiency lighting products on the market.
- Store and online merchandising to make prime store real estate an energy efficiency destination that would encourage the interaction with products and encouragement of impulse purchases.
- In collaboration with retailers and manufacturers, provide limited-time offers to leverage rebate and product pricing structure that would be more likely to get customers to buy.





Appliances & Consumer Electronics

- Regionally-oriented outreach program, which targets several specific geographic areas through the biennium – concentrating the message and solidifying PSE involvement in local communities.
- Increase awareness of rebate offerings and appliance product options, especially appliances featuring new technology.
- Utilize PSE marketing collateral in prominent public areas and at local community events, driving awareness and program results.
- Marketing activities that center around PSE rebates on the most efficient appliances on the market, which may include limited-time offers.
- Promote partnerships and limited-time offers with appliance manufacturers and retailers.
- Utilize community partner social media networks, paper and emailed newsletters, and other citizen-focused communications to inform customers about appliance and consumer electronics special offers.
- Make it easier for customers to recycle old, inefficient appliances at point-ofsale by bundling offer with new appliance rebate.

Smart Thermostats

- Increase consumer adoption of smart thermostat and connected home technology to manage home heating energy use.
- Drive participation in smart thermostat rebate program.
- Partner with retailers and manufacturers to offer special and limited-time offers on smart thermostats.
- Clear point-of-purchase materials/custom packaging (online and in store) that drive customers to purchase smart thermostats.
- Integrate promotion of smart thermostats with home heating equipment rebates.

Showerheads and Aerators

- Communicate a variety of purchasing options to customers, including availability through shopPSE, and streamline the process with clear point-ofpurchase signage.
- Encourage customers to partake in free showerhead offer via shopPSE.





- Work in partnership with city utility districts to offer low-cost/no-cost highefficiency showerheads through their utility billing process, creating claimable residential natural gas savings.
- Partner with retailers and manufacturers to provide the best customer value such as, limited-time offers and merchandising activities.
- Drive awareness of quality shower experience associated with showerheads which can be barrier to adoption for some.





D. Dealer Channel

1. Purpose

Programs within this channel are delivered to customers mostly through contractors.

2. Description: Dealer Channel Programs

The Dealer Channel's target market constituency consists primarily of resellers and contractors that sell, install, and service HVAC systems, water heating systems, windows and insulation, as standalone measures, or through comprehensive Home Performance activities that may include home energy assessments, audits and all-inclusive home retrofit services. The Dealer Channel operates primarily within the structure of Schedule E/G 214; Single Family Existing.

a. Home Energy Assessments

Home Energy Assessments provide customers with a free in-home service performed by PSE qualified independent and contracted Home Energy Assessment Specialists. The program is intended to increase the awareness of customers regarding their home's energy consumption and identify cost-effective ways to use less energy. Additionally, customers benefit from instant energy savings from the direct installation or distribution of leave-behind high-efficiency products to include, but not limited to, light bulbs, showerheads, and faucet aerators.

b. Weatherization

The weatherization program oversees the "shell" of residential structures; installation of windows, insulation, air and duct sealing. There are a wide variety of duct sealing offerings, some directed specifically to mobile homes, while other focus on site-built residences.

c. Space and Water Heating

The program manages incentives and installations of heating and water heating systems, including but not limited to natural gas furnaces and boilers, heat pumps, hydronic systems, and domestic water heaters.



3. Customer Incentives

Eligibility criteria are based on established cost effective tests. The incentives are effective January 1, 2018. A list of all requirements for incentive eligibility and participation can be found on individual incentive or program application forms.

PSE's Energy Efficiency Services maintains a comprehensive list of approved conservation Measures in its List of Measures, Incentives, and Eligibility. The Company reserves the right to adjust incentives based on market variables.

Applicable Energy Efficiency Incentive measure category headings include, but are not limited to:

- Weatherization,
- Space Heating,
- Showerheads,
- Water Heating,
- Lighting and Electronics,
- Home Energy Assessments.

a. Target Market

The target market for this program includes, but is not limited to single family property owners or tenants, service contractors, retail partners, efficiency equipment suppliers, distributors and manufacturers.

4. Marketing and Outreach Plan

The Dealer Channel delivers prescriptive rebates on home heating, water heating, weatherization and home energy assessments to residential customers through its network of trade ally partners. By partnering with local contractors, distributors and third party providers, PSE can offer its residential customers a trusted and reliable network of trained professionals who can install energy-efficient equipment and products and streamline the rebate delivery process. PSE leverages the value trade allies provide to its customers while also providing value to trade allies in the form of referrals, marketing materials, limited-time offers, and the opportunity for trade allies to provide input on program design and delivery strategies.





The goal for the Dealer Channel's 2018-19 marketing and Outreach Plan is to reach a wide and diverse segmentation of customers, both existing and new, through unique and innovative advertising, customer engagement and community outreach campaigns that build awareness of and drive participation in PSE's energy efficiency programs.

The objective for the Dealer Channel is to anticipate customers' needs and deliver to them the right energy efficiency solutions at the right time that help them use less energy and save more money. This will be achieved through the following more specific objectives:

- Customer awareness: Continually and regularly notify and alert customers via multiple channels that PSE has energy efficiency programs and rebates that can save them money.
- Market intelligence: Refine existing propensity models and utilize new customer segmentation technology and tools to deliver targeted marketing messages and offers.
- Strategic partnerships: Collaboration with contractors and distributors is key to increasing awareness of program offers and driving savings. Sponsorships with local sports franchises will help extend program reach and build brand credibility.
- Contractor referrals: Provide customers referrals to trusted, reliable and safe contractors to help them choose the right energy-efficient equipment and drive participation in rebates.
- Self-service tools: Design campaign and promotions utilizing online, selfservice tools that eliminate barriers to participation and streamline the rebates process.
- Customer satisfaction: Improve relationships with customers by providing first-rate offers and products, access to contractor network and providing stellar service.
- Education: Help customers understand how PSE's myriad energy efficiency options can not only save them money, but also increase the comfort and improve the value of their homes.

The Dealer Channel will endeavor to accomplish its goal by focusing on the following strategies and tactics:

Advertising:

• Leverage brand awareness advertising campaign creative to promote energy efficiency programs and offers.



- Comprised of digital web banners and keyword search, programmatic advertising will be targeted to qualified customers who are in the market for home energy assessments and energy-efficient home heating, water heating, weatherization and other equipment.
- Individual program advertising campaigns to be planned and implemented according to relevant seasonality and feature category, contextual and audience/behavior targeting to optimize messaging and reach the right customers at the right time.
- Advertising campaigns will be delivered through a variety of different channels, including but not limited to: digital display, digital video, TV, radio, keyword search, paid social, out-of-home, transit.

Cross-channel campaigns:

- Collaboration with other Rebates and Renewable channels and relevant programs with a shared audience and similar goals on an integrated residential customer engagement campaign will be integral to increasing customer awareness and driving overall residential energy efficiency savings.
- A multi-channel integrated approach gives customers a comprehensive look at the full range of energy efficiency offerings.
- Cross-channel campaigns will be delivered through a variety of channels and tactics, including but not limited to: email, direct mail, social media, events, community outreach.

Contractor-driven campaigns:

- Partner with contractors, distributors and manufacturers to promote special and limited-time offers to drive participation in Dealer Channel programs and rebates.
- Integrate trade allies into customer engagement campaigns to provide opportunity to increase contractor referrals and educate customers on the benefits of energy efficiency.
- Leverage contractor partners' customer base to co-promote Dealer Channel programs and rebates.

Ongoing promotions:

- Develop new and unique limited time offers to attract new and encourage repeat customers.
- Conduct more active follow up to customers who receive referrals to Dealer Channel programs.
- Leverage PSE-owned channels to regularly promotion Dealer Channel promotions and limited time offers.
- Drive customers via seasonal/usage notifications, email and advertising to access the online Energy Center for personalized tips and tools to use less energy and save more money.





Community outreach campaigns:

 Deliver community engagement and promotion of specific programs and campaigns targeted to high-priority communities identified through market intelligence and research.

The Dealer Channel will endeavor to accomplish its overall goal by focus on specific strategies and tactics by program:

Home Energy Assessments

- Promote self-service online scheduling platform and integrate customized PSE Energy Efficiency messaging and offers.
- Drive positive customer satisfaction to encourage further program participation and word of mouth referrals.
- Support CAN / service provider partners with collateral and materials to effectively and efficiently serve and educate customers.
- Provide follow-up resources and exclusive limited time offers for customers interested in efficiency upgrades.
- Integration with Direct to Consumer channel to cross-promote relevant product and rebate offerings.
- Continue door-to-door sign-up and email marketing campaigns in communities identified by the Energy Efficient Communities Team and informed by propensity for participation and age of home.

Home Heating, Water Heating, Weatherization

- In collaboration with manufacturers, distributors and contractors, provide special discounts and limited time offers to leverage rebate and product pricing structure that would be more likely to get customers to buy.
- Develop down-cycle marketing strategies to encourage even participation rates throughout the year.
- Develop marketing and outreach strategies to bring natural gas storage and tankless water heater measures to market.
- Leverage PSE's Home Energy Assessment program to target single-family rental market and deliver a comprehensive rebate program to eligible customers for heating, water heating and weatherization upgrades.



- Collaborate with Direct to Consumer channel to cross-promote product and rebate offerings and develop integrated multi-channel marketing and outreach campaigns.
- Partner with Leasing Services to support phase out of existing water heater equipment, replacing with more efficient options.

Contractor Alliance Network (CAN)

- Support a data-driven performance framework to manage trade allies operating in PSE energy efficiency programs
- Drive customer referrals for all CAN related products to CAN.
- Develop updated suite of marketing collateral and training opportunities for contractors to drive awareness of PSE's energy efficiency rebates and offers.
- Targeted and innovative advertising campaign to promote CAN as a trusted resource of pre-screened, independent trade allies committed to helping customers make safe, dependable and efficient energy choices.




E. Residential New Construction

Schedule E215, G215; applicable to Single Family and Manufactured Home New Construction, and

Schedule E218, G218; applicable to Multifamily New Construction

The following discussion applies to new residential construction, both single-andmultifamily structures. Conservation Schedule terms and conditions, as outlined in the above-noted Schedule numbers, govern the applicability, measure types, funding, analyses and general rules and provisions for each structure classification. Where there are specific requirements, service offerings, measures, incentives, marketing, or outreach applicable to the specific structure type, those are so noted in each of the following sections.

1. Single Family New Construction

Schedule E/G 215

The Single Family New Construction (SFNC) program is a part of the Residential Business-to-Business channel, along with Low Income Weatherization, Multifamily Retrofit, and Residential New Construction. The SFNC program works with builders to influence higher-than-code energy efficient standards throughout the PSE electric and natural gas service territory.

The program discussion is presented here to maintain the numerical sequence of the Conservation Schedules, as also presented in Exhibit 1: Savings and Budgets.

a. Purpose

PSE's SFNC program increases the installation of energy efficient measures into new electric and natural gas SFNC homes constructed in the PSE service territory. High efficiency measures need to be specified and installed during design and construction; otherwise, it may be a long time before energy efficient changes to the buildings will take place. As a result, single family residences may potentially be restricted to inefficient energy use for decades.

The SFNC program targets structures with three or less residential units per building, per Washington State Energy Code 2015 Edition (effective July 1, 2016).



Energy conservation measures include, but are not limited to, energy efficient upgrades to building shell, appliances, lighting, HVAC and water heating systems.

Eligible customers include an owner, developer, or agent acting on behalf of responsible party of service receiving electricity or natural gas through PSE. This program provides financial incentives to the above audience for both natural gas and electric residential meters. The incentives offered are calculated using REM/Rate modeling software adjusted to the Pacific Northwest Standard modeling protocols.

b. Description

Based on the measure/product type and market factors, PSE may provide incentives to its customers at different points along the value chain. Market barriers vary dramatically from measure to measure and incentive amounts are based on regionally accepted energy savings estimates and incremental efficiency measure costs. Incentives may be subject to change in response to revisions in savings estimates, average incremental costs or changes in State codes.

c. The Customer Experience

Qualifying customers include, but are not limited to, single-family new construction builders, property owners, contractors, efficiency equipment suppliers, distributors and manufacturers. Structures must be newly constructed single-family homes prior to occupancy. Single family buildings are classified as containing three attached dwelling units or less.

Because the incentive is customized based on the modeled energy savings of the individual home, it makes it easy for the customer to understand the impacts of their building design. This helps to provide builders with the options and information they need to determine the costs and benefits of their design beyond the energy code.

PSE, in alignment with NEEA's New Homes Performance Path, MBA's Built Green programs, and other regional utilities, is developing a comprehensive marketing awareness strategy to support current and future homebuilders that construct energy efficient homes. PSE's awareness in the community will be communicated through in-unit program collateral designed to inform the residents and prospective buyers of the program benefits.





d. Opportunities for Program Awareness

Since this is a newly revived program, there are many opportunities to use a diverse mix of integrated marketing, promotion communication strategies and tactics to ensure customer awareness and participation. The primary objective is to elevate program awareness to building partners, help educate their customers about the benefits of building and living in an energy efficient home. Additional opportunities are outlined in section g.

e. Target Market

The target market includes builders and raters of single family homes. Among the motivations cited by builders for constructing homes that exceed energy codes, some use it as a marketing tactic to differentiate their homes in the marketplace. Others have a strong personal ethic toward energy conservation that drives them to build more energy-efficiently. In some cases the impetus to build a more energy-efficient home comes at the request of the buyer. Other frequently mentioned motivations include building a better-quality home and buyer comfort, both of which builders stated are important for achieving buyer satisfaction.

f. Customer Incentives Overview

The program forecasts that all incentives will be prescriptive, based on meeting a minimum 20 percent above code threshold. Similarly, it is forecast that all calculated savings will be based on RTF-Approved Standard Modeling Protocol Guidelines for New, Single-Family Construction. BPA requirements also integrate the NW Modeling Requirements v. 17.0 and RTF Unit Energy Savings (UES) Measures through the AXIS Database. When state energy codes are updated, base case homes for each state will be updated, which may result in a reduction in potential energy savings and payment.

The Single-Family New Construction Performance Path is planned to utilize REM/ Rate, RTF UES Measures, and the NEEA-maintained AXIS database to compare the modeled energy consumption of a new home to the modeled energy consumption of a typical, code-built home. This should allow a customer to request a payment based on the energy savings of the new home, compared to the code home. Calculations are performed by the AXIS database, which provides a report with required documentation to customers.



g. 2018-2019 Single Family New Construction Marketing & Outreach Plan

The Single Family New Construction program uses a diverse mix of integrated marketing, promotion, and communication strategies and tactics to raise customer awareness. The primary objective is to elevate awareness of energy efficient building practices and standards to building partners and help educate their customers (homebuyers) about the benefits of building and living in an energy efficient home.

The program also uses a mix of marketing activities to reach the designers, builders, owners, and developers of new single family homes. PSE plans to align with Built Green and other regional green certifications, partner with MBAs and NEEA, and work with raters to increase program participation. The primary high-level strategies used to help penetrate the market include the following:

Green Building Cooperatives

The Single Family New Construction program's partnership goal with various green building associations is to increase the number of homes certified through Built Green, LEED, and other green building programs. Green building cooperatives help PSE to extend visibility using less money – has a broader reach than what could be obtained independently. Partners promote PSE's energy efficiency programs, green building, and building practices that result in energy efficient homes. Key partners include but are not limited to: Master Builder Associations (King, Snohomish, Pierce, Central, Skagit, Island Counties); and Sustainable Connections.

These programs use a bundled approach to release reoccurring messaging and updates to primary and secondary target audiences. They will also develop a strategy based on the developing market conditions and affordable opportunities in appropriate publications.

Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. Some key initiatives to elevate education, communication and awareness may include:

- Direct-to-builder brochures.
- Direct mail and advertisements.
- Newsletters.





- Online/website development.
- Consumer education: VOICE articles, model home signage, builder cooperatives.
- Cross program positioning: Community Outreach and Education, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.

Industry Events and Builder Relations

As a lead-generating tool and to increase program awareness with large volumes of industry partners, builders, contractors, suppliers and associated design professionals, the program exhibits at various green building conferences and exhibitions as well as presenting to smaller organizations and workshops. Primary promotional tactics include:

- Development of displays and signage.
- Design and production of collateral materials.
- Pre-event advertising: publications, e-news, e-vites, web.
- Post event surveys and debriefs.
- Tracking leads generated for ROI.
- Continue to participate in conferences and tradeshows.
- Host or co-host events for customers and contractors with other programs.
- Continue to co-sponsor the MBA at a modest level.

Outreach Plan

The Energy Efficient Communities team will work with program team lead in a variety of outreach initiatives in 2018-19 to support the Single Family New Construction program, and may include:

- Outreach to the development community.
- Promote new construction programs to municipalities.
- Promote energy efficient new construction at industry events.

2. Manufactured Home New Construction

The Manufactured Home New Construction (MHNC) program is a part of the Residential Business-to-Business channel, along with Multifamily Retrofit, Low Income Weatherization, and Residential New Construction.



The MHNC program works with manufacturers, sales people, and manufactured home buyers to influence increased energy efficiency standards throughout PSE territory. The program discussion is presented here to maintain the numerical sequence of the Conservation Schedules, as also presented in Exhibit 1: Savings and Budgets.

a. Purpose

The Manufactured Home New Construction (MHNC) electric program provides incentives for cost-effective measures to customers residing in PSE's electric territory. The base case (pre-existing) is a current manufactured home built in the Pacific Northwest, which tends to be slightly better than HUD-code. The base case considers individual components including envelope, HVAC, lighting, appliances and water heating.

The Pacific Northwest is well known for its Northwest Energy Efficient Manufactured (NEEM) program. This program provided compelling reasons why the US DOE needed to update to a new minimum standard for manufactured homes. The new "HUD Code" was meant to increase efficiency levels in future manufactured homes to just below the current NEEM standard (aka "ENERGYSTAR"). The new HUD code was originally planned to go into effect in 2018, but due to the current Federal administration agenda, NEEA does not expect it to be adopted in the next four years. In the meantime, PSE is working with BPA and other utilities to identify a market transformation plan that will establish an updated "NEEM 2.0" specification with even greater efficiency standards that can be supported through local utility programs once the code change occurs. Currently, BPA and other utilities support and incentivize the NEEM standard.

b. Description

Based on the measure/product type and market factors, PSE may provide incentives to its customers at different points along the value chain. Market barriers vary dramatically from measure to measure and incentive amounts are based on regionally accepted energy savings estimates and incremental efficiency measure cost. Incentives may be subject to change in response to revisions in savings estimates, average incremental cost or changes in State codes.





c. The Customer Experience

Qualifying customers include, but are not limited to, manufactured home end users, single-retailers, efficiency equipment suppliers, distributors and manufacturers. Structures must be newly constructed, single-family manufactured homes prior to occupancy.

PSE, in alignment with NEEA, NEEM, and other regional utilities, is developing a comprehensive marketing awareness strategy to support current and future manufactured homebuyers and manufacturers that construct energy-efficient manufactured homes. PSE will work with manufacturers, sales people, and manufactured homebuyers to influence the market to build and sell more efficient manufactured homes. PSE awareness in the community will be communicated through in-unit program collateral designed to inform the residents of the program benefits.

d. Opportunities for Program Awareness

Since this is a newly revived program, there are many opportunities to use a diverse mix of integrated marketing, promotion communication strategies and tactics to ensure customer awareness and participation. The primary objective is to elevate program awareness to manufactured home partners, and help educate their customers about the benefits of living in an energy efficient home.

The program will use a mix of marketing activities to reach the manufacturers, sales people, and owners of newly constructed manufactured homes.

e. Target Market

The target market includes, but is not limited to, manufactured home end users, retailers, efficiency equipment suppliers, distributors and manufacturers.

f. Customer Incentives Overview

All incentives are planned to be prescriptive based on RTF-Approved or PSE deemed measures. The base case (pre-existing) is a current manufactured home built in the Pacific Northwest, which tends to be slightly better than HUD-code. The base case considers individual components including envelope, HVAC, lighting, appliances and water heating. Energy savings for a new, ENERGY STAR manufactured home (NEEM 1.1) is based on multiple analyses using the SEEM simulation engine for baseline and efficient cases for a weighted average of five cities (to represent the Northwest).



This is based on a prototype and heating/cooling system type for single-prototype square footage. Output of this analysis is then divided into three heating/cooling zones, based on a weighted average of SEEM run results for the five locales. The SEEM model also accounts for interaction with the lighting power reduction of this measure. BPA Documentation Requirements consider these factors. More-detailed information is available on the RTF's Unit Energy Savings (UES) Measures webpage.

Manufactured homes must be electrically heated and designed, constructed and certified by NEEM as a new, high-performance manufactured home.

g. 2018-2019 Manufactured Home New Construction Marketing & Outreach Plan

The Manufactured Home New Construction program uses a diverse mix of integrated marketing, promotion, and communication strategies and tactics to raise customer awareness. The primary objective is to elevate awareness of energy efficient manufacturing practices and standards to manufacturing partners and help educate their customers (homebuyers) about the benefits of building and living in and energy efficient manufactured home.

The primary high-level strategies used to help penetrate the market include the following:

Manufacturer Outreach

The Manufactured Home New Construction program's goal is to increase the number of manufactured homes certified through Northwest Energy Efficient Manufactured (NEEM) housing program and to promote the benefits of purchasing a green certified homes. Through manufacturer's and manufactured home salespersons the MHNC program will promote PSE's energy efficiency programs, green building, and building practices that result in energy efficient manufactured homes. Key partners may include but are not limited to: NEEA, ENERGY STAR, and NEEM.

Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals.





Some key initiatives to elevate education, communication and awareness may include:

- Manufacturer learning sessions.
- Online/website development.
- Consumer education: model home signage.
- Cross program positioning: Community Outreach and Education, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.
- Turn-key retailer marketing packets communicating the value of energy efficiency may be provided by NEEA.

Outreach Plan

The Energy Efficient Communities team will work with program team lead in a variety of outreach initiatives in 2018-19 to support the Manufactured Home New Construction program, and may include:

- Promote new construction programs to municipalities.
- Promote energy efficient new construction at industry events.

F. Multifamily New Construction

The following discussion applies to newly-constructed multifamily structures. Conservation Schedule terms and conditions, as outlined in the above-noted Schedule numbers, govern the applicability, measure types, funding, analyses and general rules and provisions for each structure classification. Where there are specific requirements, service offerings, measures, incentives, marketing, or outreach applicable to the specific structure type, those are so noted in each of the following sections.

1. Purpose

The Multifamily New Construction program acquires cost-effective energy savings from multifamily new construction projects that increase the installation of energy efficient measures into new electric & natural gas heated buildings constructed in the PSE service territory.



In addition to newly constructed multifamily structures covered under terms of Schedule 218 (for both natural gas and electric service), the Multifamily New Construction program may also include single family structures where the single family homes are a part of a campus or larger multifamily project under schedule 215 (for both natural gas and electric service).

Eligible customers for multifamily new construction include owners, developers, or agents acting on behalf of a responsible party of service receiving electricity or natural gas through PSE. This program provides financial incentives to the above audience for both natural gas and electric residential and commercial meters. The incentives offered are both prescriptive and calculated.

In the new construction marketplace, high efficiency measures need to be specified and installed during design and construction. Otherwise, it may be up to 30 years before energy efficient changes to the buildings will take place. For measures and incentives that apply to existing multifamily structures, please refer to the Multifamily, Existing program measures in Exhibit 4: Measures, Incentives and Eligibility.

2. Description

Rebates and incentives are offered to eligible natural gas and electric PSE new construction developers, contractors, trade allies and customers (cumulatively, the program refers to these as "partners") who are constructing new multifamily buildings. The program also works with these partners to market energy efficient equipment to their customers. Energy Efficiency encourages the purchase and installation of energy efficient products for their construction projects.

For new multifamily construction projects, financial incentives are packaged under one grant and are structured to work in accordance with current Business Energy Management programs. PSE provides a single point of contact to development teams for all energy efficient measures and/or upgrades. This allows PSE to maximize the energy savings opportunity in each development and reduce multiprogram confusion for the customer.

Any Customer, owner or tenant with appropriate owner consent, of a new construction commercial, multi-family, or mixed-end-use facility or outdoor lighting which will receive natural gas service from the Company, and/or electric service under a special contract, or Schedules 7, 7A, 8, 24, 25 & 11, 26 & 12, 31, 35, (or their equivalent) of Electric Tariff G or Natural Gas Tariff of the Company through PSE's residential schedule 23 and commercial schedule 31.





Structures include but are not limited to single-family dwellings, duplexes, apartments, town homes, condominiums, dormitories, affordable housing, low-income housing, workforce housing, and assisted living residences.

There may be any combination of residential and commercial meter mixes in each type of construction. Once the meter type mix is confirmed with the development team, the appropriate PSE programs are identified to serve that development. Incentives include a variety of end-use classifications, not limited to:

- Lighting: Common area,
- Appliances: Clothes washers, refrigerators,
- Ventilation; in-unit whole-home or common area,
- HVAC equipment upgrades.

For all of the conservation Measures installed, Energy Efficiency receives measure installation data directly from builders, developers, showrooms and distributors. It is therefore possible to precisely track measure details.

a. Affordable Housing

The Multifamily New Construction program has learned there is a critical need in the PSE service territory for affordable rental housing. King County has documented in their Consolidated Housing and Community Development Plan for 2015-2019 (updated March 22nd, 2017) and King County Consortium 2017 Annual Action Plan, that the availability of affordable housing is scarce for households earning between 40 and 60 percent AMI (area median income), severely insufficient for those below 40 percent AMI, and completely insufficient for below 30 percent AMI.

There is an extensive need for more living units in the affordable and workforce housing market sector. It is likewise important to help provide "hard to reach" customers most in need with high levels of energy efficiency and affordable utility costs. Given the current construction boom in multifamily new construction projects now is a strategic and critical time to maximize investment in communities that PSE serves.

In response to this serious affordable housing deficiency and void, the ResNC team proposes to create a higher energy efficiency financial incentive level available to MFNC projects that will offer more than 50 percent of total housing units to those earning 60 percent AMI or lower. The goal is to remain consistent with LIW program income eligibility guidelines.



The energy conservation measures offered are intended to be identical to those offered in Multifamily New Construction program and all enhanced measure incentives are cost effective.

3. Customer Incentives

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and location within the PSE service territory, fuel type (natural gas or electric), product type and product quantity. The incentives are effective January 1, 2018. Energy Efficiency's List of Measures, Incentives and Eligibility are included in the Biennial Conservation Plan as Exhibit 4. PSE may, at its sole discretion, adjust rebates based on market variables.

Incentive amounts and savings values are regularly reviewed by PSE and are based on regionally accepted energy savings estimates and incremental efficiency measure cost. Rebates may be subject to change in response to revisions in savings estimates, average incremental cost or changes in Federal appliance efficiency standards or State codes.

Incentive schedules are identified by heat source. Calculated incentives will be offered based on standard energy efficient calculation practices. Incentives may be paid upon completion of work and submittal of required program documentation.

Field inspections and audits may be conducted at random to ensure quality installations and verify completion of work.

a. Type of rebate/incentive

Qualifying customers receive incentives by submitting a processing application form, project backup documentation such as drawings/cut sheets, and invoices/receipts at the time of verification. Incentive requests are screened for completeness of customer entries, and where required for submittal of additional documentation. Incentive processing complies with PSE internal audit standards.

4. Target Market

The target market for this program may include but is not limited to multifamily new construction builders, developers, architects, mechanical and electrical engineers, lighting designers, property owners, contractors, retail partners, housing authorities, efficiency equipment suppliers, distributors and manufacturers.





5. Multifamily New Construction Marketing and Outreach Plan

The Multifamily New Construction program uses a diverse mix of integrated marketing, promotion, communication strategies and tactics to ensure customer awareness and participation. The primary objective is to elevate program awareness to building partners and help educate their customers (residents) about the benefits of building and living in an energy efficient home. Overarching strategies will include, but will not be limited to:

- Identify projects and reach development teams early in design process.
- Drive traffic to new construction homes shows and demos.
- Deliver energy efficiency presentations to various community audiences.
- Host employee brownbag sessions to build employee awareness of energy efficiency programs and services.
- Identify and recognize business partners for their contributions in serving PSE's customers.

The program also uses a mix of marketing activities to reach the designers, builders, owners, and developers of new multi-unit residential structures.

The primary high-level strategies used to help penetrate the market include the following:

Green Building Cooperatives

Green building cooperatives help PSE to extend visibility using less money – and have a broader reach than what could be obtained independently. Partners promote PSE's energy efficiency programs, green building, and building practices that result in energy efficient multifamily homes. Key partners include but are not limited to: Sustainable Connections; AIA Seattle; and Cascadia Green Building Council.

These programs use a bundled approach to release reoccurring messaging and updates to primary and secondary target audiences. They will also develop a strategy based on the developing market conditions and affordable opportunities in appropriate publications.



Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. Some key initiatives to elevate education, communication and awareness may include:

- Direct-to-builder brochures.
- Direct mail and advertisements.
- Leave-behind collateral for new residents.
- Newsletters.
- Online/website development.
- Consumer education: VOICE articles, model home signage, builder cooperatives.
- Cross program positioning: Community Outreach and Education, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.

Industry Events and Builder Relations

As a lead-generating tool and to increase program awareness with large volumes of industry partners, builders, contractors, suppliers and associated design professionals, the program exhibits at various green building conferences and exhibitions as well as presenting to smaller organizations and workshops. Primary promotional tactics include:

- Development of displays and signage.
- Design and production of collateral materials.
- Pre-event advertising: publications, e-news, e-vites, web.
- Post event surveys and debriefs.
- Tracking leads generated for ROI.
- Continue to participate in conferences and tradeshows.
- Host or co-host events for customers and contractors with other programs.





G. Multifamily Retrofit

Schedule E/G 217

The Multifamily Retrofit program is a part of the Residential Business-to-Business channel, along with Low Income Weatherization, (page 5), and Residential New Construction (page 29).

1. Purpose

The objective of the Multifamily Retrofit program is to increase the installation of cost effective energy efficient Measures into existing multifamily (MF) buildings with PSE natural gas and/or electric service.

2. Description

The Multifamily Retrofit program is designed to increase the uptake and installation of selected energy efficient Measures in existing multifamily buildings with five or more attached residential dwelling units located in PSE's electric and natural gas service areas. The team works with property owners, managers, trade ally contractors, and tenants to encourage program participation. The program also serves multifamily campuses which have a mixture of building types including buildings with less than five units. Multifamily structures and campuses typically have opportunities for upgrades in the units, common areas, and building envelope.

Measures may include windows, insulation, and air sealing enhancements; appliance, lighting, and HVAC upgrades; O&M improvements; behavioral modification; and calculated commercial upgrades such as central boilers and solar pool heaters. This program targets installation of energy efficient measures occurring during planned retrofit and replace upon failure. PSE will update current measures list and incentives as needed.

The program continually researches and develops new and innovative means to achieve cost effective energy savings. Examples may include behavioral based programs such as web-enabled thermostats and Strategic Energy Management (SEM).



Web-enabled thermostats empower customers with both knowledge and control of their heating costs through a simple user-interface accessed on their smart phone. SEM provides a holistic approach to multifamily property portfolios by engaging managers, maintenance staff, and residents to achieve energy cost savings through behavioral changes, operational improvements, facility maintenance, and attention to utility accounting.

Through effective customer education and implementation, PSE is continually exploring the impacts of how new technologies and energy management plans can contribute to the quantification of behavioral based energy savings.

3. Customer Incentives

Measure incentive eligibility criteria are based on, but not limited to, established industry standard cost effectiveness tests, structure type, fuel type (natural gas or electric), product type, and product quantity. A detailed list of Energy Efficiency's Measures, Incentives and Eligibility are included in Exhibit 4.

4. Target Market

The target market includes multifamily property owners, managers, maintenance staff, equipment suppliers, and contractors.

5. Marketing and Outreach Plan

Key marketing and outreach strategies for the Multifamily Retrofit program work in tandem with the program's business development team to expand and build a prospect network in a changing market. Outreach efforts help to increase program participation with multifamily property owners and property managers, leverage relationships with trade ally contractors, and raise tenant awareness on the value of in-unit energy efficiency upgrades and how tenants play a part.

The Multifamily Retrofit program promotes and produces "Energy Fairs" to large multifamily communities. These events take place in high-traffic common areas of apartment and condominium communities during the installation of energy efficiency products. Energy Fairs not only help educate customers on the benefits of energy efficiency upgrades, but they also help raise awareness that PSE is a partner in helping communities become more sustainable.





Through the use of segmentation studies and market research, PSE conducts customized outreach to multifamily communities, especially those with the highest savings potential. The program provides translated collateral in multiple languages in order to properly educate English-as-a-second language customers on energy efficiency products and help build program awareness.

The primary promotional strategies include but are not limited to:

a. Industry Events and Membership Collaborations

Industry events are a strong lead generating tool for the program – it's one of the best ways to quickly get face-time with contractors and property owners.

The program partners with several multifamily associations who manage these types of events. The program leverages outreach through various association memberships such as the Washington Multifamily Housing Association (WMFHA) and the Rental Housing Association (RHA). These partnerships broaden the program reach to provide venues where members can collectively engage. The program targets several large-scaled exhibitions that are comprised of multifamily property owners, on-site leasing managers, maintenance personnel, contractors, suppliers and associated professionals. In addition to attending conferences, there are several workshops and presentations held throughout the year that provide additional networking opportunities, learning, recognition and motivation with smaller organizations. The promotional tactics used to support this strategy include:

- Booth & tabletop displays
- Booth materials: brochures, drawings, signage
- Program handbooks: company and program profiles, logo usage and applicable advertisements
- Pre-event advertising (publications, e-news, evites, web)
- Presentation leave behinds
- Post event surveys/debriefs
- Tracking leads generated for ROI

In partnership with the Marketing team, the Energy Efficient Communities team will help develop and implement outreach strategies to promote PSE's residential and commercial energy efficiency programs and services. The outreach strategy for the Multifamily Retrofit program will work with both customers and business partners.



The team will provide tenant customers with information about applicable products and services that PSE provides, and help deliver information to property managers/owners and trade allies. This will be done through a variety of outreach mechanisms, including multifamily complex educational events, program awareness campaigns, community events, presentations, and internal PSE employee trainings.

The Energy Efficient Communities Team will work with the program team leads and Marketing to identify ways to reach Multifamily Retrofit constituents in conjunction with other mass marketing strategies developed for Retail and Dealer channels.

b. Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. Some of the key initiatives to elevate education, communication and awareness may include:

- Energy Fairs for residents and community members.
- Awareness and marketing kit for portfolio managers.
- Availability of energy use monitoring devices.
- Quarterly e-Newsletter to property managers and contractors.
- Energy challenges to bolster tenant engagement and encourage behavioral modification.
- Energy efficiency certification/recognition to promote property management participation in PSE programs.
- Developing new materials to highlight the beneficial components of Strategic Energy Management (SEM).
- Dedicated Energy Advisor and/or community outreach representative to capitalize on Direct Install customer engagement opportunities and to help promote related PSE products & services.

c. Collateral Development

To complement the program's business development outreach efforts, promotional materials are designed and produced to effectively communicate key messages and highlight the benefits of the efficiency measures to target audiences. Persuasive collateral is used during direct customer engagement, site visits and event outreach as well as a cross-selling tool for program contractors.





Educational leave behinds are also designed to help tenants understand the functionality as well as the immediate and long-term benefits of installations. The collateral development strategy may include but is not limited to the following materials:

- Executive summaries.
- Direct installation notices in multiple languages.
- Case studies. .
- Videos.
- Cross utility interaction.
- Service area maps.
- Third party business cards.
- Customer participation surveys.

d. Advertising Campaigns and Media Relations

To generate program awareness amongst multifamily customers, various advertising campaigns are launched through multiple means or channels to make customers aware about its presence in the market. The program typically uses a bundled approach to highlight measures and program benefits.

The advertising and media relations tactics used may include:

- Print advertisements in trade publications.
- Contractor advertising co-operatives.
- Direct Mail and/or e-blasts. .
- Online/Website Development.
- Newsletters.
- Internet advertisements.
- Social media.
- Television. .
- Radio.
- PR / Editorial coverage.

e. Overall Multifamily Retrofit Channel Outreach Strategies Include:

- Identify projects and reach contractors before retrofit process begins.
- Host local "Energy Fairs" to enroll condominium customers to programs and to educate apartment tenants to Energy Efficiency efforts taken on by their property manager and what they can do on their own.
- Deliver energy efficiency presentations to various community audiences.





- Host employee brownbag sessions to build employee awareness of energy efficiency programs and services.
- Identify and recognize business partners for their contributions in serving PSE's customers.





H. Residential Pilots

Schedule E/G 249

Pilot programs and demonstration projects may be undertaken to determine whether certain strategies and Measures are cost-effective in the long run. Pilots are employed to test cost-effective ways to demonstrate market opportunities for energy efficiency.

Pilots may include tests of measure cost and performance, customer acceptance and delivery methods. In compliance with WAC 480-109-100(1)(c) and condition (7)(c), PSE will pursue pilots when there is a reasonable expectation of savings achievement in the current or subsequent biennium, and will only claim energy savings that achieve energy savings sufficient to demonstrate cost-effectiveness by passing the Total Resource Cost (TRC) test.

1. Residential Pilots

The Single Family Rental pilot is designed to create electric and natural gas savings in the Weatherization, Water Heat and Space Heat programs by targeting rental customers who have recently had a Home Energy Assessment. The proposed pilot would offer bundled services and would also focus communications on rental property owners and portfolio managers.

Residential Energy Management will also consider or pursue several measures or delivery methods that are analogous to pilots, including:

- Multifamily automatic tubspout diverters and line-voltage web-enabled thermostats,
- Ductless heat pump upgrades, and
- Directly-installed advance power strips.



III. BUSINESS ENERGY MANAGEMENT



A. Pilots

Schedule E/G 249

Pilot programs and demonstration projects may be undertaken to determine whether certain strategies and Measures are cost-effective in the long run. Pilots are employed to test cost-effective ways to demonstrate market opportunities for energy efficiency.

Pilots may include tests of measure cost and performance, customer acceptance and delivery methods. In compliance with WAC 480-109-100(1)(c) and condition (7)(c), PSE will pursue pilots when there is a reasonable expectation of savings achievement in the current or subsequent biennium, and will only claim energy savings that achieve energy savings sufficient to demonstrate cost-effectiveness by passing the TRC test.

1. Pay for Performance Pilot

Business Energy Management will target the engagement of several customers in 2018 to produce both electric and natural gas savings. The pilot's objective will be the selection of customers with building of at least 50,000 square feet with large savings potentials. Incentives will be designed to be source-blind, and consist of a combination of capital, O&M, and behavior savings. Incentives would be based on conservation savings realized.

2. Commercial Upstream

The Commercial Upstream pilot will focus on providing incentives to distributors who stock more high-efficiency HVAC equipment. The intention of the pilot is to make qualifying equipment more readily available to PSE customers. Interceding at this point of the value chain will provide customers who have emergency replacement needs better access to qualifying equipment, and program staff expect that upstream incentives will lead to better regional access.

3. Pilot-Analogous Initiatives

In the BEM Direct Install programs, staff are developing offerings where customers may have a custom option to receive incentives for specific equipment unrelated to other business types, such as chick warmers for agriculture, and kitchen ventilation equipment for hospitality establishments. PSE also considers the Commercial Kitchens' initiative to standardize Demand Control Kitchen Ventilation (DCKV) incentive processing to be analogous to a pilot.





B. Commercial/Industrial Retrofit

Schedules E250, G250

1. Purpose

The purpose of the Commercial and Industrial Retrofit program is to encourage Puget Sound Energy's existing Commercial and Industrial (C/I) customers to use electricity and natural gas efficiently by installing cost-effective energy-efficient equipment, adopting energy-efficient designs, and incorporating energy-efficient operations at their facilities.

2. Description

PSE works with Commercial and Industrial customers to provide incentives for cost-effective energy efficiency upgrades to lighting, equipment, building shell, industrial process, and select O&M improvements. These services are provided on the customer's behalf and, where specified by the customer, will be developed in conjunction with design engineers, contractors, and/or vendors.

PSE conducts site assessments to identify savings opportunities, verify existing equipment and system operations, and makes recommendations to customers. PSE also reviews third-party savings estimates and analyses, and when required performs in-house analyses to validate energy savings. PSE works 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.

Commercial/industrial retrofit projects commonly include: lighting system upgrades, HVAC equipment upgrades, HVAC controls improvements, commercial refrigeration measures, and industrial process modifications. Additionally, incentives for existing building commissioning (O&M) improvements are provided through the Comprehensive Building Tune-Up (CBTU) Program.

Upon the customer's decision to proceed with a project, PSE issues a standardized Conservation Grant Agreement and Grant Attachment that establishes terms and conditions for participation in PSE's Custom Grant Program and also explains how the measure will be verified. After the agreement is signed by both parties, the customer is given notice to proceed with the energy efficiency project.



Following completion of the project, PSE verifies the installation and energy savings via an on-site inspection, review of equipment operation and trend log data where necessary, and collection of project invoicing and specifications of installed equipment.

a. Business Lighting Grants

To simplify the customer experience, PSE offers one Business Lighting grant program. This single program addresses customers' needs by providing custom calculated incentives for lighting and lighting controls measures.

b. Contracted Programs

In addition to Commercial/Industrial Retrofit Custom Grant offerings, PSE contracts with industry experts to develop and implement cost effective programs tailored to the unique needs of target markets. Measure-specific incentives are provided through these contracted programs:

i. Industrial System Optimization Program (ISOP)

The program focuses on operational and maintenance (O&M) measures to be verified through custom analysis on an individual project or site basis. Incentives are based on actual savings achieved. Customers agree to continue monitoring and verification following implementation to assure persistence of the savings.

3. Customer Incentives

Incentives are:

Site-Specific Basis incentives, or "custom" incentives, rely on generally accepted engineering calculations and measure costs provided by the customer or the customer's contractor. Electric and natural gas measures may receive maximum incentive grants up to 70 percent of the measure cost when the grant incentive does not exceed the cost-effectiveness standard, less program administration costs. Measures where cost exceeds the cost-effectiveness standard will receive grants that are on a declining scale and will be less than 70 percent of the measure cost.

Generally, electric and natural gas measures that have a Simple Payback of less than one year are not eligible for a Site-Specific Basis incentive.





Prescriptive Basis incentives are provided for Commissioning and Optimization of Existing Buildings and for measures that are eligible for rebates under Schedule E/G 262, Commercial and Industrial Incentive Program.

The incentive amount for a measure is the same as that which is available under Schedule E/G 262.

Performance Basis incentives may be provided where energy savings are determined through direct measurement of energy usage and/or the use of efficiency indicators.

Energy-use monitoring: PSE may provide secure web site access to facility energyuse data for building occupants, free of charge for up to two years. More typically, access will be free of charge for one year to allow the occupant to verify building and/or measure performance according to energy-use projections. To be eligible, customers must be on a rate schedule with demand (kW) as well as energy (kWh) charges. Compatible metering and remote data retrieval capability must be in place at the customer's facility. PSE is not obligated to replace or upgrade nonconforming meters. Customers are expected to use the monitored information to improve energy efficiency at the facility. Customers will demonstrate annual energy savings potential through energy management operations and maintenance as well as identification of further efficiency measures and equipment upgrades.

Incentives for short and long payback projects will be adjusted as needed, according to market conditions.

Processing of Incentives: Customers provide PSE with project costs and estimated savings. Customers assume full responsibility for selecting and contracting with third-party service providers. Projects must be approved for funding prior to installation/implementation. A grant agreement will be required.

All Commercial and Industrial Retrofit incentives will be processed using a standard Grant Agreement, listing the measure description, measure life, measure cost, and grant amount. An attachment to the Grant Agreement will list specific measure details, and will describe the process PSE will use to verify that the measure is installed correctly and performing efficiently.

The PSE Energy Management Engineer (EME) and the Manager of Business Energy Management oversee all incentives and program operations. EMEs update project changes in the tracking system and review monthly results.



The Manager of Business Energy Management reviews the cost-effectiveness of all efforts. A review of results and refinement of program strategies are conducted annually.

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within the PSE service territory, fuel type (natural gas or electric), product type and product quantity.

A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included in the 2018-2019 Biennial Conservation Plan as Exhibit 4.

4. Target Market

PSE targets all Commercial and Industrial customers with program offerings and marketing efforts appropriate to given business type, size and operation.

5. Marketing and Outreach Plan

PSE's Commercial Industrial Retrofit Program, which includes Business Lighting and custom grants, primarily relies on the following channels to maintain an abundant quantity of custom retrofit project leads: repeat program participants, internal PSE channels such as Business Services and Energy Efficient Communities, and trade ally relations with contractors, engineering design firms and energy services companies (ESCOs).

a. Communications

PSE will communicate about C/I Retrofit program offerings as follows:

- Continue creating collateral to be more awareness-driving than project generation-focused.
- Focus on taking control of your energy.
- Provide information on the web addressing customer needs and moreeffectively communicate program offerings.
- Provide in-person application and program offering trainings.
- Pursue web-based applications.
- Leverage other PSE customer-facing departments to communicate PSE Efficiency Program information.





b. Coordination with PSE Staff and Departments

Routine communications with internal PSE channels responsible for direct communication with customers and others who influence decisions about energy efficiency, such as public officials, will yield greater program awareness.

- Proactive coordination with Energy Efficient Communities staff.
- Regular meetings and communications with Business Services staff, including Major Accounts Executives and Business Accounts Managers.
- Routine updates to PSE Energy Advisors about programs.
- Collaboration with PSE media outreach and social media teams to publicize significant projects and program offerings.

c. Community Outreach

Energy Efficient Communities staff will develop and implement outreach strategies to promote program offerings as follows:

- Presentations to developer, architecture, and engineering associations and other trade associations to publicize program offerings.
- Leverage relationships with local governments and other entities to gain awareness of new commercial and industrial developments, and connect developers and architects with program offerings.
- Identify business customers whose energy efficiency achievements illustrate results of PSE program participation and highlight their successes at events, in case studies and through media outreach to increase awareness of program offerings.
- Host sessions internally for PSE staff to increase employee awareness of programs, providing increased communication to customers regarding energy efficiency programs.

d. Coordination with Program Providers

PSE Corporate Communications will coordinate all messaging and marketing efforts by contracted third party programs, including:

Industrial Systems Optimization.



e. Coordination with Trade Allies

PSE will continue to work with contractors, engineers and ESCOs who develop and deliver custom retrofit energy efficiency projects and who communicate with building owners and managers about PSE's programs. Coordination efforts will include the following:

- Participation in meetings to update trade allies on program offerings.
- Providing information about PSE's role in energy efficiency retrofit projects.
- Coordination with trade allies on PSE energy efficiency program messaging.
- Expansion of Contractor Alliance Network (CAN) into the C/I sector of trade allies.
- Leveraging of the Northwest Trade Ally Network for promotion of lighting efficiencies, and trade ally relations with contractors, engineering design firms and energy services companies (ESCOs).



C. Commercial/Industrial New Construction

Schedules E251, G251

1. Purpose

The purpose of the Commercial and Industrial New Construction Program is to influence efficient design, building components and equipment in new buildings by working with customers, developers, tenants, owners, designers and builders of new Commercial and Industrial (C/I) facilities. The program provides incentives for installation of cost-effective energy efficient Measures to achieve savings beyond the applicable Energy Code or industry standard practice where Code requirements do not exist.

2. Description

PSE works with owners, designers and developers of any large or small new Commercial and Industrial facilities, or major remodels, to propose cost-effective energy efficient upgrades that exceed energy codes or standard practice where minimum efficiency requirements are not prescribed by code. Three paths are available to provide assistance and/or funding for New Construction energy efficiency measures. New Construction Post-occupancy Commissioning is also offered in addition to the building paths.

The first path is similar to the retrofit program where component measures are evaluated individually and funding is based upon cost-effectiveness. Under this approach, customers may receive up to 100 percent of the incremental cost over a code-compliant baseline. There is a streamlined process for new construction lighting projects that have allowable lighting power density values listed in the applicable code.

The second path is a whole-building approach that utilizes building energy simulation to demonstrate improvement over energy code requirements.

PSE will work with designers to incorporate measures that produce at least 10 percent overall savings beyond applicable energy code, including local jurisdiction amendments. Given the time required for planning and construction, these projects typically take several years to complete.



The third path includes Prescriptive Basis incentives for measures that are eligible for rebates under Schedule E/G 262, Commercial and Industrial Incentive Program. The incentive amount for a measure is the same as that which is available under Schedule E/G 262, but energy savings may be calculated based on actual Site-Specific conditions and Code Baseline adjustments, if necessary. A complete listing of available incentives is provided in Exhibit 4 of the 2018-2019 Biennial Conservation Plan.

Customers assume full responsibility for utilizing their design teams and contractors to provide information to PSE for evaluation of grant funding. Projects must be approved for funding prior to installation/implementation to be eligible.

3. Customer Incentives

Customers provide PSE with project scope, costs, proposed design details, and energy savings calculations, and PSE will utilize this to calculate estimated savings and incentives. Customers assume full responsibility for selecting and contracting with third-party service providers. A grant agreement or signed prescriptive measure rebate application will be required.

Component Measure incentives: For energy-efficient measures with a simple customer payback greater than one year, PSE provides grants toward the incremental installed cost of the measure. Maximum grants will be based on the Company's cost-effectiveness criteria. Electric and natural gas measures may receive incentive grants up to 100 percent of the incremental measure cost where the grant incentive does not exceed the cost-effectiveness standard less program administration costs. Measures that exceed the cost-effectiveness standard will receive grants that are on a declining scale and will be less than 100 percent of the measure cost.

In instances where project first-costs, site conditions, or operational parameters lead to a customer fuel choice that would offset gains from implemented efficiency measures, incentives for fuel switching will not be provided, and choices that totally eliminate the need to provide an energy source to the site are not eligible for incentives.

Lighting Power Density NC measure: This measure is a streamlined approach to providing a component incentive for new construction lighting systems that provide better energy performance than a code minimum compliant lighting system. This measure utilizes a PSE-designed energy savings worksheet that is based on the Washington State Energy Code lighting compliance worksheet.





Whole Building Approach incentives: PSE provides incentive for projects designed and built to be at least 10 percent more energy efficient than a Code baseline building built under the applicable Energy Code. Under the *whole building approach*, PSE will offer an incentive amount for efficient designs that exceed the Energy Code baseline by a minimum of 10 percent. The incentive will be based on a whole-building, full-year energy model, with the savings being the difference between a minimally code-compliant baseline model and the proposed building design model.

Eligibility for Whole Building incentives: Whole Building Incentives are designed for buildings which will receive electric service from PSE and/or natural gas service from PSE. Projects to be served only with natural gas from PSE only qualify for whole building incentives based on the modeled natural gas savings.

Projects using multiple energy sources, but to be served with electricity from PSE must demonstrate that the whole-building efficiency is improved by a minimum of 10 percent to qualify for an incentive. In instances where project first-costs, site conditions, or operational parameters lead to a customer fuel choice that would offset gains from implemented efficiency measures, incentives for fuel switching will not be provided, and choices that totally eliminate the need to provide an energy source to the site are not eligible.

Prescriptive Basis Incentives: Rebates for equipment listed under the electric/natural gas Commercial and Industrial Rebate Incentive Program are available for new construction except when required by the applicable Energy Code. Other Prescriptive Basis Incentives are not available within the Schedule 251 program. When a rebated equipment item has an energy interaction with Measures proposed under the *whole building approach* or the *component approach, the energy savings for the rebated equipment will be removed from the whole building energy calculations or the component approach energy savings calculation.*

Post Occupancy Building Commissioning: If the customer engages the services of a third party commissioning agent for post occupancy building commissioning, who is independent of the design and construction team, then the customer may be eligible for an incentive. To qualify for this incentive, post-occupancy commissioning will start approximately 9 months after the warranty period starts and complete within an 18 month time period of occupancy. Post Occupancy Commissioning will focus on optimization of building energy systems including, but not limited to: lighting, HVAC, and building controls.



PSE will consider the measure cost as that portion of the commissioning agent services that will impact energy efficiency on the project. The savings shall be assumed to be a percentage of the building's estimated annual energy use. This percentage will be based on studies of the energy savings impact of commissioning.

The commissioning agent will utilize the building's energy consumption data from PSE as well as any building system control trends and point/system energy monitoring, to assist in analyzing the building's energy use and to support the energy optimization activities.

The commissioning agent shall prepare (or update if one already exists) a Facility Guide which describes the major energy using building systems (HVAC, lighting, domestic hot water, etc.), including control sequences, operating set points, schedules, and procedures for testing and verifying proper and efficient operation of the equipment and controls. As part of this post occupancy service, the Commissioning Agent will provide all deliverables specified in the Program Requirements (for example, On-Going Commissioning Plan, On-Going Training Plan, Facility Guide, Investigation Details/Cx Report, etc). The owner's operation and maintenance staff will be trained on how to monitor energy use and efficiently operate the building's systems.

Energy-use monitoring: Upon occupancy, the Company may provide secure web site access to facility energy-use data for building occupant, free of charge for up to two years. More typically, access will be free of charge for two years to allow the occupant to verify building and/or measure performance according to energy-use projections. To be eligible, customers must be on a rate schedule with demand (kW) as well as energy (kWh) charges.

Compatible metering and remote data retrieval capability must be in place at the customer's facility. PSE is not obligated to replace or upgrade nonconforming meters.

Customers should use the monitored information to improve energy efficiency at the facility. Customers will demonstrate annual energy savings potential through energy management operations and maintenance as well as identification of further efficiency Measures and equipment upgrades.

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within the PSE service territory, fuel type (natural gas or electric), product type and product quantity.





A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included as an Attachment to the 2018-2019 Biennial Conservation Plan as Exhibit 4.

4. Target Market

Owners and developers of commercial or industrial facilities to be served by PSE with electricity or natural gas are eligible for new construction incentives. Also targeted are market actors, including but not limited to, owner's representatives, facility design architects and engineers, trade allies, development organizations, property management companies, and financing organizations.

5. Marketing and Outreach Plan

PSE's program for commercial and industrial new construction will remain an incentive for building owners, designers, and developers to include energy-efficiency measures that are above and beyond that which is required by the building code or industry standard practice.

In order to reach the right audience at early stages, marketing and outreach teams will explore a diverse set of messaging and tactics to reach architects, municipalities, developers and engineers, respectively.

Market activity for new construction is expected to be generally flat during the 2018-2019 program period yielding a similar number of new project leads as the previous biennium. Due to long lead time for new construction project development, new leads for major projects during 2018-2019 often will not contribute energy savings until the 2020-2021 program period.

<u>Overview</u>

The Commercial New Construction program uses a diverse mix of integrated marketing, promotion, communication strategies and tactics to ensure customer awareness and participation. The primary objective is to elevate program awareness to building industry partners and customers about the benefits of building energy efficient facilities and how PSE incentives can support their energy conservation goals.



The program uses a mix of marketing activities to reach the designers, builders, owners, and developers of new commercial facilities, or commercial facilities undergoing major retrofits that invoke current energy code compliance requirements. This marketing and Outreach Plan is being developed in collaboration with the Multi-family New Construction program, and resources and activities will be shared whenever it is advantageous for the programs. The primary high-level strategies used to help penetrate the market include the following:

Green Building Cooperatives

Green building cooperatives help PSE to extend visibility using less money – and have a broader reach than what could be obtained independently. Partners promote PSE's energy efficiency programs, green building, and building practices that result in energy efficient multifamily homes. Key partners include but are not limited to: AIA Seattle; Puget Sound ASHRAE, and Cascadia Green Building Council.

These programs use a bundled approach to release reoccurring messaging and updates to primary and secondary target audiences. They will also develop a strategy based on the developing market conditions and affordable opportunities in appropriate publications.

Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. Some key initiatives to elevate education, communication and awareness may include:

- Direct-to-builder brochures.
- Continue to develop mini-case studies that include new construction design and commissioning incentives, and likely rebates. Group multiple case studies together by vertical market for a more comprehensive snapshot for similar businesses and industries.
 - Target industries: hospitals, office buildings, national retail chains
- Update standardized content for public presentations.
- Newsletters.
- Online/website development.
- Incorporate messaging around other services PSE provides for new construction projects beyond incentives for improved customer service and greater participation.




- Cross program positioning: Community Outreach and Education, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.

Industry Events and Builder Relations

As a lead-generating tool and to increase program awareness with large volumes of industry partners, builders, contractors, suppliers and associated design professionals, the program exhibits at various green building conferences and exhibitions as well as presenting to smaller organizations and workshops. Primary promotional tactics include:

- Development of displays and signage.
- Design and production of collateral materials.
- Pre-event advertising: publications, e-news, e-vites, web.
- Post event surveys and debriefs.
- Tracking leads generated for ROI.
- Continue to participate in conferences and tradeshows.
- Host or co-host events for customers and contractors with other programs.

Outreach Plan

The Energy Efficient Communities team will work with program team lead in a variety of outreach initiatives in 2018-2019 to support the Commercial New Construction program, and may include:

Overall Commercial New Construction Channel outreach strategies:

- Identify projects and reach development teams early in design process.
- Deliver energy efficiency presentations to various community audiences.
- Host employee brownbag sessions to build employee awareness of energy efficiency programs and services.



D. Commercial Strategic Energy Management

Schedules E/G 253

1. Purpose

The purpose of the Commercial Strategic Energy Management program is to achieve customer cost reductions for major resource utility bills through behavioral changes, operational improvements, facility maintenance, and attention to utility accounting. Savings result from changes in practices and do not require major investments in equipment.

2. Description

PSE offers Commercial Strategic Energy Management (CSEM) to any school district, public-sector government agency, and Commercial or Industrial (C/I) customer with a minimum portfolio baseload to meet cost-effective thresholds. The CSEM program targets larger customers with multiple facilities such that the cost of implementation can be recovered through savings achieved. Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for CSEM.

Customers qualify for the CSEM program based on their annual PSE energy purchases. A typical customer baseline for maximum program funding is 20,000,000 kWh for electric only or 2,700,000 therms for natural gas-only service from PSE. Funding levels are prorated based on the amount of staff a customer would need to allocate in order to achieve cost-effective savings from SEM efforts. At a minimum, the customer needs to use 1,000,000 kWh or 135,000 Therms, or the equivalent to participate in the program.

A CSEM customer employs, contracts, or designates existing staff to implement Energy Management responsibilities, including accounting for resource consumption, assessing facilities, recommending actions, monitoring progress, calculating savings and communicating program information to organization stakeholders.

Monetary grants include a "start-up" grant for completion of deliverables associated with building the program foundation. The start-up deliverables include identifying an Energy Manager, setting up an energy-accounting database, writing a company resource management plan, and completing facility action plans.





Once start-up deliverables are complete, the customer may qualify for "performance grants" based on achieving energy savings associated with Energy Management practices and "target grants" for meeting or exceeding preestablished energy-reduction targets.

The CSEM agreement is valid for three years. Over this time, PSE anticipates a 10-12 percent reduction in overall energy use. Savings are calculated using industry standard practices and energy accounting methodologies. Reported annual savings are a variance from a fixed baseline. PSE may elect to renew a customer's CSEM agreement in three-year increments to provide continued support and additional performance incentives.

PSE's CSEM support program is comprised of a "menu" of services, which can be tailored to meet the specific needs of the customer. Typical RCM services include, but are not limited to, the following assistance and support:

a. Program Start Up

- Designing and implementing a CSEM program.
- Developing baselines, policies and guidelines, and facility action plans.

b. Resource Accounting Software

- Purchase and/or implementation of resource accounting software.
- Audits of existing databases to review for inclusion of all facilities, accounts, meters, etc., sufficient facility details, missing data, and overall data integrity.

c. Technical Assistance

- On-site walk-through audits to train customer staff to identify waste and opportunities for improved efficiency.
- Analysis and reporting of savings relative to established baseline.

d. Education & Training

- Training in fundamental concepts for designated Energy Managers and support personnel such as custodial, maintenance, and facilities staff.
- Educational materials for classroom or building occupant use including checklists, fact-sheets, and calculators.



 Training stipend to support professional development in Building Operation or Energy Management.

e. Energy Data Services

- Historical and on-going monthly PSE billing data and access to resource accounting software.
- Energy interval data for internet viewing of facility natural gas and electric interval meter data.

f. Cash Incentives

- "Start-up" incentive intended to share the cost of program start-up that is paid upon satisfactory completion of deliverables.
- Performance grants for customers who achieve energy savings after completing their deliverables.
- Target grants for customers who achieve a pre-established targeted amount of energy savings after completing their deliverables.

The CSEM program has also assisted customers in establishing Energy Star Benchmarks for their facilities using EPA's Portfolio Manager. PSE will continue to help customers to identify potential targets, improve energy efficiency to meet award qualifications, coordinate the application and inspection process, and submit material to EPA for Energy Star awards.

Additionally, access to energy accounting software has allowed PSE CSEM customers to facilitate greenhouse gas accounting and other climate change and sustainability initiatives. The value of this service routinely exceeds those stated in the CSEM program scope of work.

PSE continues to explore ways to make the CSEM program cost-effective for smaller customers. PSE efforts will continue to work with CSEM consultants, customers, and other support agencies to develop this market.

3. Customer Incentives

PSE continues to develop creative incentive options to increase CSEM support for a variety of customer segments. The CSEM program incentives are as follows:

 Resource Accounting Software – PSE will provide access to resource accounting software populated with PSE data and able to incorporate other customer data.





- Start-Up Incentive For qualifying organizations, PSE will provide an incentive to help get the program started with initial set-up of utility database and program organization, provided the customer completes the database set-up, develops a resource management plan and outlines facility action plans for their buildings. Customers will receive PSE support tailored to their needs, including staff training, technical assistance, interval metering, and other services.
- Performance-Based Incentives PSE may provide cash incentives to customers who achieve energy savings relating to occupant behavioral practices and improvements in operational and maintenance (O&M) efforts. If customers meet or exceed energy savings targets, PSE will offer a target incentive to the customer and an increased performance incentive for additional savings. Energy-savings targets will be based on a typical 5 percent reduction from a 12-month baseline and actual savings will be calculated and verified by PSE. Incentive amounts will meet the current commercial and industrial program cost-effective criteria.

4. Marketing and Outreach Plan

PSE's Commercial Strategic Energy Management (CSEM) Program utilizes a broad array of marketing materials and training activities to reach its customer base. The nature of the CSEM program and its need for ongoing communications efforts with customers blurs the distinction between promotional marketing and customer communications. An integrated approach is required to support this program.

Ongoing communications, public relations and Energy Manager training are critical to convey the value and integrity of PSE's program to new and existing customers.

Changes to the program, including payout structure and eligibility thresholds need to be emphasized, particularly to potential customers as PSE is focused on growing customer participants in the near term.

a. Program Communications to Existing Customers

Support the CSEM program with development of information and training materials for customers.

- Recognize outstanding customers with awards and designations.
- Update collateral and web pages to be more customer-friendly.





- Continue to promote and enhance tools to support ownership of process, making them easy for customers to use and implement.
- Support for the CSEM annual meeting with displays and handouts as needed.
- Establish resources and protocol for webinar trainings.

b. Marketing Communications to Existing and Potential Customers

Provide marketing materials including brochures, web updates and standard presentation materials to communicate about the CSEM program.

- Continue to update marketing materials to incorporate program changes required.
- Continue to develop case studies to demonstrate an array of CSEM success stories and feature these businesses in monthly newsletters.
- Implement webinars to add value to existing membership while appealing to potential customers.

c. Internal PSE Communications

Communicate key messages about the CSEM program to audiences inside of PSE that serve as channels to customers and other stakeholders.

- Provide a conduit for communicating critical updates or program information to the Energy Efficient Communities and Business Services groups.
- Review communications developed by Energy Efficient Communities.

d. Publicity

- Work with media outreach and social media teams to publicize successful projects.
- Work with media outreach team to develop articles about Energy Managers and their accomplishments.

e. Community Outreach

Energy Efficient Communities staff will develop and implement outreach strategies to promote enrollment in the CSEM program:

Presentations to Chambers of Commerce, Large Businesses, and . Municipalities to encourage program participation.





- Leverage relationships with local governments and other entities to gain awareness of program offerings.
- Identify business customers whose energy efficiency achievements illustrate results of PSE program participation and highlight their successes at events, in case studies and through media outreach to increase awareness of program offerings.





E. Large Power User/Self Directed

Schedule E258

1. Purpose

The purpose of this program is to acquire cost-effective energy savings from large Commercial and Industrial (C/I) customers by providing incentives that support self-directed energy efficiency projects that the customers themselves propose.

2. Description

This program solicits electric energy efficiency upgrades through a Request for Proposal (RFP) process. C/I customers receiving electric service under Schedule 40, 46, 49, 448, 449, 458, or 459 receive a funding allocation based on their electric usage and are responsible for proposing cost-effective project(s) to utilize their allocation. This is classified as the non-competitive phase.

Proposals are evaluated by PSE engineering staff for technical soundness, costeffectiveness and compliance with energy code and tariff requirements. Customers sign a standard PSE Conservation Grant Agreement, defining project cost, PSE incentive amount, and verification requirements prior to installation of project Measures.

The Large Power User Self-Directed program is implemented in cycles, with the current program cycle spanning January 1, 2015 to December 31, 2018. Customers are given until March 31, 2017 to propose projects that utilize their incentive allocations under the non-competitive phase. Customers not designating projects that fully utilize their allocation forfeit their remaining balance to a competitive phase, in which remaining funds are available to all program participants via competitive bid.

In the Competitive Phase, eligible customers respond to an RFP in order to obtain remaining incentive funding that was not claimed during the non-competitive phase. In this phase, eligible customers may have access to funds beyond their original allocation. In the current cycle, the competitive phase RFP was issued on May 15, 2017, with the submittal deadline being July 14, 2017.





Received proposals were ranked based on cost-effectiveness and other criteria specified in the RFP. Competitive funding will be awarded, in order of project ranking, until all funds are allocated to projects.

3. Customer Incentives Overview

The incentive budget for eligible customers will be the Electric Conservation Rider revenues less deductions made for the Company's administrative program costs (7½ percent) and for the Northwest Energy Efficiency Alliance (NEEA) budget line item (10 percent).

The total Electric Conservation Rider revenue amount and customer allocation will be determined by the Company's State Regulatory and Cost of Service Department.

Energy efficiency measures are subject to the Company's Total Resource Cost Test to determine the grant amount to be paid. The incentive amount is up to \$0.50 per annual kWh savings, subject to PSE Cost Effectiveness Standards.

Customers receiving service under Schedules 448, 449, 458 or 459 only receive incentives through the Schedule 258 program and cannot receive funding from other programs.

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within PSE service territory, product type and product quantity. A detailed list of Energy Efficiency Measures, Incentives and Eligibility are available as Exhibit 4 of the 2018-2019 Biennial Conservation Plan.

4. Target Market

Commercial and industrial customers receiving electric service under Schedule 40, 46, 49, 448, 449, 458 or 459 are eligible to participate in this program.

5. Marketing and Outreach Plan

Effort will be made to ensure that eligible customers have every opportunity to take advantage of the incentive allocation available to them. If it becomes evident early in the program duration that some customers are having difficulty initiating the program process, the Company will offer to provide extra assistance to identify projects and perform any required follow-through.





F. Energy Efficient Technology Evaluation

Schedules E/G 261

1. Technology Evaluation Overview

The purpose of Energy Efficiency Technology Evaluation is to identify new, energy efficient technologies and products for PSE program offerings. Ideally, PSE would identify cost effective technologies and measures with significant savings potential, which are commercially available. However, there are many emerging technologies that range from "commercially available, but not used in the Northwest," to "conceptual" or "prototypical" technologies still in the development phase.

It is relatively simple to determine whether new, commercially available technologies are suitable, as long as generally accepted engineering calculations can be used, and manufacturers can provide reliable data. For example, vendors frequently approach PSE with new, improved products, claimed to save more energy than their older models, or their competition. Usually these proposals are evaluated by the Energy Management Engineer who is managing the project, who then shares his/her experience with others in the group.

Some technologies are not so simple to evaluate. Those that are truly new typically have little experiential history, or there is no generally accepted method to calculate the performance. Clearly, it would be risky to broadly offer incentives through PSE's programs - risky with regard to uncertain savings and risky for its customers due to unforeseen product issues. If the potential savings look significant, PSE may try the technology on a limited quantity of projects, especially if it is working with a customer who understands the risks and would like to be an "early adopter." Sometimes the most prudent approach is to monitor the progress of the technology, especially if the savings potential appears limited. PSE's effort is not intended for basic research, or product development, but to identify technologies that are available and suitable for its programs.

The most challenging situations arise when vendors propose products that are "too good to be true." Often their savings claims are supported by testimonials from satisfied customers, with little or no reliable test data. Many technologies, such as transient voltage suppressors, power factor correction devices and paint with high R-Value, have been known for years to save little or no energy, but the vendor may insist their product is different, even though it may only have a different name on the box.





Fortunately, PSE has experience with many of these products, or can readily find others who have had experience. It is important, however, to distinguish between inaccurate claims and those that might truly be the new emerging technology that deserves attention.



G. Commercial Rebates

Schedules E/G 262

1. Purpose

PSE offers fixed incentives for select, commonly applied Measures to commercial and industrial customers. These rebates have been developed for measures in which energy savings can be standardized over a wide variety of applications, and where a competitive market pricing structure exists to ensure cost-effectiveness.

2. Description

The following measure categories are managed in-house by PSE Staff:

- Commercial Clothes Washers,
- Commercial Kitchen Equipment,
- Commercial Retail Lighting Lighting To Go.

PSE contracts with industry experts to implement cost effective Measures tailored to the unique needs of target markets. The following measure categories may be offered through contracted programs:

- Upstream Commercial HVAC and Water Heat Rebates,
- Direct Install Measures (Lighting, Refrigeration, Plug Load, Basic HVAC and Water Saving) for Small Businesses, Lodging and Small Agriculture customers.

PSE program staff develops program design, monitors program performance, results, and trends. Programs are coordinated closely with the electric and natural gas Commercial and Industrial Retrofit Program.

Program refinements and cost-effectiveness are reviewed with engineering staff, the Evaluation Team, and the Manager of Business Energy Management as necessary on an ongoing and adaptive basis. Incentive Measures, marketing and the fulfillment process may be modified, as needed, to respond to developments in technology, market conditions, customer acceptance and/or changes in supplier/contractor delivery and pricing.





3. Customer Incentives

Most incentives are a flat dollar amount, usually for a "measure" or "device" that is a "stand alone" unit. Customers can generally select from qualifying models (for instance, ENERGY STAR® qualified commercial deep fat fryers). Some incentives are a flat amount per "unit size" of the measure, where unit size may be "per ton" or "per horsepower." A list of all requirements for eligibility and participation can be found on individual program application forms or participation agreements.

Most incentives are paid directly to the customer, but may be assigned by the customer to the contractor. For some measures, the incentive can be deducted from the sales price at the point of sale, in which case the participating vendor may be eligible for an additional sales incentive.

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within PSE service territory, fuel type (natural gas or electric), product type and product quantity. A detailed list of Energy Efficiency service measures, incentives and eligibility are included as an Attachment to this 2018-2019 Biennial Conservation Plan as Exhibit 4.

4. Target Market

Rebate Measures are targeted to appropriate commercial markets, including but not limited to: Large Office, Small Office, Large Retail, Small and Specialty Retail, Restaurants, Commercial Laundries, Hotels/Lodging, Groceries, Convenience Stores, Hospitals, HealthCare/ Assisted Living, Schools, Property Management, Farms and Agricultural businesses.

Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for Measures and incentive amounts offered under this program. Multifamily related businesses or those with dwelling units are served under the Multifamily Retrofit programs, Schedules E217 and G217.

In the rare instance that customers operate a business on residential rate schedules (for instance, out of the home or garage) PSE will offer the appropriate measures to them specifically tied to their type of business providing that the customer is able to show proof of current business license.



5. Marketing and Outreach Plan

PSE's Commercial Rebates programs deliver prescriptive rebates on commercial kitchen, laundry, HVAC and lighting equipment for small and medium-sized business customers through its network of trade ally partners. By partnering with local contractors, distributors and third party vendors, PSE's Contractor Alliance Network offers its commercial customers a trusted and reliable network of trained professionals who can install energy-efficient equipment and offer upgrades tailored to their specific business needs.

The goal for Commercial Rebates 2018-19 marketing and Outreach Plan is to reach small and medium-sized business customers through targeted advertising, email, direct mail, social media, earned media and community outreach to build awareness of and drive participation in PSE's energy efficiency programs and rebates.

The objective for Commercial Rebates is to anticipate business customers' needs and deliver to them tailored energy efficiency solutions that help them use less energy and save more money. This will be achieved through the following more specific objectives:

- Customer awareness: Continually and regularly notify and alert customers via multiple channels that PSE has energy efficiency programs and rebates for businesses of all sizes that save them money.
- Market intelligence: Conduct research to create segmentation and propensity models to develop a targeted strategy for delivering marketing messages and offers to the appropriate decision makers dependent on the different type and size of the business. Utilize data analytics to effectively deliver outreach campaigns in communities where they are needed most.
- Strategic partnerships: Collaborate with cities, municipalities, communities and organizations to extend the reach of program offers, drive savings, build brand credibility and foster community involvement.
- Contractor referrals: Provides customers referrals to trusted, reliable and safe contractors to help them chose the right energy-efficient equipment and upgrades and drive participation in rebates.
- Self-service tools: Design campaigns and promotions utilizing online, selfservice tools that eliminate barriers to participation and streamline the rebates process.





- Customer satisfaction: Improve relationships with customers by offering first-rate products and offers, access to contractor network and providing stellar service.
- Education: Help customers understand how PSE's myriad energy efficiency options can save them money, both in the short-term and long-term, no matter how large or small the upgrade.

The Commercial Rebates programs will endeavor to accomplish their goal and objectives by focusing on the following strategies and tactics by program:

Commercial Kitchen & Laundry

PSE offers commercial kitchen and laundry rebates to restaurants and other owners/managers of commercial kitchens (school cafeterias, corporate cafeterias, church kitchens, etc.), and laundry operations.

To promote these products, marketing efforts will encourage participation by building program awareness across distributor, retailer and customer channels. Specific activities may include:

- Targeted marketing and outreach strategy utilizing segmentation research with a specific emphasis on lodging/hospitality industry and laundry segments.
- Cross-promotion of products to customers who have already participated in other commercial efficiency programs.
- Collaboration with restaurant supply distributors to co-promote commercial kitchen rebates and incentives.
- Collaboration with kitchen equipment manufacturers to develop limited-time offers to drive participation in rebate program.
- Disbursement of point of purchase (POP) signage for participating instant rebate vendors, supported by professional field service staff.
- Identify opportunities and develop strategy for promoting equipment upgrades and rebates to multilingual customers.
- Promotion of rebates to business customers at relevant industry trade shows
- Participation in small business outreach activities to cross-promote commercial kitchen and laundry programs as part of a comprehensive business energy assessment.





Commercial Retail Lighting – Lighting To Go

PSE offers commercial customers retail lighting offerings through the Lighting To Go program, which partners with distributors and showrooms to offer rebated product to commercial contractors. This point of sale approach provides discounts which are passed on to the customer, encouraging greater uptake of more efficient lighting options.

To promote these products, marketing efforts will encourage participation by building program awareness across distributor, showroom, and contractor channels. Specific activities may include:

- Disbursement of point of purchase (POP) signage for participating instant rebate vendors, supported by professional field service staff.
- Development of marketing collateral that provides increased awareness of PSE Lighting to Go program rebates, delivered to contractors through various interaction points.
- Promote contractor education on how to access discounted products.

Commercial HVAC

The Commercial HVAC program will encourage the replacement and maintenance of existing HVAC units. Program staff are investigating the potential to incent rooftop unit replacements at the distributor level, providing an upstream rebate which reduces the overall cost of the product for the contractor and customer. Maintenance measures may qualify for downstream rebates which can be accessed by both the contractor and the customer.

To promote these products, marketing efforts will encourage participation by building program awareness across distributor, contractor, commercial building owner, and building operator channels. Marketing activities may include:

- Cross-promotion of commercial HVAC rebates to customers who have already participated in other commercial efficiency programs.
- Development of promotional materials to encourage replacement of aging and inefficient HVAC units before equipment fails.
- Collaboration with distributors to incorporate commercial HVAC rebates in wholesale pricing to contractors.
- Development of promotional follow-up materials to participating customers to ensure program attribution.





- Promotion of rebates to business customers at relevant industry trade shows
- Participation in small business outreach activities to cross-promote commercial HVAC programs and services to small business customers as part of a comprehensive business energy assessment.

Direct Install Programs

The Small Business Direct Install (SBDI) and Small Commercial Comprehensive Retrofit (SCCR) programs are designed to encourage hard-to-reach small business customers to complete energy efficiency upgrades to their facilities and buildings through lighting, refrigeration, and HVAC retrofits. The programs will focus on providing varying levels of business energy assessments to identify basic and complex retrofit opportunities and facilitate participation in PSE's rebate programs, based on segment type, such as hospitality, grocery and agriculture.

To promote these programs, marketing efforts will encourage participation by targeting commercial business owners and operators, small business tenants, and contractor channels. Marketing activities may include:

- Coordinated marketing and outreach efforts to promote participation in community engagement events or direct install "blitzes".
- Enhanced city engagement to demonstrate community partnerships with city staff, elected officials and chambers of commerce.
- Collaboration with local retailers in blitz communities to provide exclusive efficiency offers for commercial and residential customers.
- Cross-promotion of other relevant commercial rebate programs to encourage replacement of aging and inefficient HVAC, kitchen and laundry equipment
- Cross-promotion of product and rebate offerings to residential customers in blitz communities.
- Promotion of rebates to business customers at relevant industry trade shows
- Develop a custom approach for more complex small business types such as hospitality, agriculture and grocery.

Contractor Alliance Network (CAN)

- Support a data-driven performance framework to manage trade allies operating in PSE energy efficiency programs
- Drive customer referrals for all CAN related products and services to CAN.



- Develop updated suite of marketing collateral and training opportunities for contractors to drive awareness of PSE's energy efficiency rebates and offers.
- Targeted and innovative advertising campaign to promote CAN as a trusted resource of pre-screened, independent trade allies committed to helping customers make safe, dependable and efficient energy choices.

Community Outreach

Energy Efficient Communities staff will focus on developing and implementing outreach strategies to promote program offerings as follows:

- Presentations to chambers of commerce, visitors and convention bureaus, restaurant and hospitality associations and other trade associations to publicize program offerings.
- Partner with municipalities, businesses services to target small to mid-size business in select communities to deliver small business door-to-door blitzes.
- Leverage relationships with local governments and other entities to gain awareness of new commercial and industrial developments, and connect developers with program offerings.
- Identify business customers whose energy efficiency achievements illustrate results of PSE program participation and highlight their successes at events, in case studies and through media outreach to increase awareness of program offerings.





IV. REGIONAL PROGRAMS



A. Northwest Energy Efficiency Alliance

Schedule E254

1. Description

NEEA is a non-profit organization working to accelerate the innovation and adoption of energy-efficient products, services and practices in the Northwest. As a partner with NEEA, Puget Sound Energy contributes funding for regional energy efficiency initiatives, actively participates on NEEA's Board of Directors and advisory committees, and supports various related initiatives in the Puget Sound Energy service area.

The NEEA 2015-2019 Business Plan, adopted in 2014, focuses on creating lasting change in energy efficiency in the Northwest through strong partnerships with the region's utilities and market actors. The 2015-2019 business plan was developed through a participatory year-long strategic planning process with the NEEA Board and region as a whole. The Business Plan provides for some flexibility, allowing funders to conduct some market transformation activities themselves, and has a five-year total regional savings goal of at least 145 average megawatts (aMW).³ Further information about NEEA's history, structure, initiatives and press is available on <u>NEEA's website</u>.

a. Regional Electric Market Transformation

The NEEA Board approved an operating budget of \$169 million in funding for 2015 – 2019 market transformation initiatives from Northwest utilities including the Bonneville Power Administration (BPA) (on behalf of more than 130 utilities), Puget Sound Energy, Energy Trust of Oregon, Idaho Power, Avista Corporation, PacifiCorp, Seattle City Light, Tacoma Power, Snohomish County PUD and others.



³ Please see NEEA's 2015-2019 Business Plan at: http://neea.org/docs/default-source/default-document-library/neea-2015-19-business-plan---board-approved.pdf?sfvrsn=2



b. Regional Natural Gas Market Transformation

In 2018-2019 NEEA intends to continue development of five key natural gas initiatives, as discussed in Exhibit 10:

- Natural gas heat pump water heaters,
- Combination water and space heat systems,
- Natural gas clothes dryers,
- Rooftop HVAC, and
- Hearth products,

consistent with its 2015-2019 Business Plan and its pending 2018 Operations Plan.

NEEA estimates that the first of these products to yield therm savings may potentially be natural gas clothes dryers. A 0.67 natural gas water heater⁴ may also produce savings, although there is a potential that neither will result in therm savings in the coming biennium.

PSE's share of the natural gas market transformation funding is 41.25 percent, with a 2018-2019 total of \$4.44 million.

B. Production and Distribution Efficiency

Schedule E292

1. Purpose

The purpose of the Production and Distribution Efficiency program is to evaluate and implement energy conservation Measures within PSE's own generation and distribution facilities.

2. Description

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.

⁴ Although excluded from the initial five pilot measures, NEEA's natural gas market transformation budget also includes a scanning function. This activity provides for NEEA staff to examine the energy-efficiency marketplace for new technologies that may be incorporated into the suite of offerings.



Within production facilities, 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. These improvements can involve reducing the energy use within the substation itself and the distribution of energy from it. They can range from on-site Measures like lighting and heat pumps to system Measures like phase balancing and conservation voltage reduction (CVR) (also referred to as voltage optimization [VO]).

This program requires coordination between the Energy Efficiency program manager and staff in other PSE departments to collect project specific details for program tracking and reporting.





V. PORTFOLIO SUPPORT



A. Data and Systems Services

The Data and Systems Services organization performs the critical role of planning, development, support, and enhancement of Energy Efficiency systems and tools. The team manages the ongoing support of the department's Demand Side Management central (DSMc) system, which:

- Compiles and tracks Energy Efficiency programs, projects and measures, and
- Creates reporting, forecasting, and business performance metrics.

The Data and Systems Services organization also conducts analytics by understanding and presenting program data as meaningful knowledge and insights. The team is responsible for reviewing and ensuring data integrity from a wide variety of sources, including vendors, program staff, and contractors.

B. Rebates Processing

Rebates Processing functions include intake, qualification, payment and customer service, as well as process improvement in the customer experience.

Improvements include, but are not limited to, redesigning rebate forms for clear instructions and qualifying criteria, analyzing rejection reasons for the root cause of nonqualified rebates, and simplifying the application process for customers.

1. Description

The Rebates Processing budget is predominantly labor and includes training, planning and development costs projected by Rebate Processing staff.

Rebates Processing roles include:

- Intake, qualifying, data entry, and incentive payment processing;
- Communicating with customers regarding the rebate submittal, including status and payment;
- Collaborating with the Energy Advisors to provide a seamless and efficient customer experience;
- Demonstrating best practices and continuous improvement;
- Coordinating timely customer payment with PSE Accounts Payable.





2. Target Markets

Rebates Processing staff are integral to PSE's Residential and Business Energy Management groups' energy savings and target needs.

C. Verification Team

As one of the key "V" components in EM&V, PSE's Verification Team performs on-site inspections and confirmations of randomly-selected participating homes and businesses to assure energy efficiency measures are properly installed. Combined with other Evaluation and Measurement functions, the Verification Team seeks to secure both confidence in claimed energy savings and improvements in program quality.

The "Measurement & Verification: Policies, Guidelines, Protocols & Processes" document introduces M&V protocols to be used across the Energy Efficiency functions.

1. Verification Team Guidelines

PSE created the "Measurement & Verification: Policies, Guidelines, Protocols & Processes" document in response to Condition (6)(f)(ii):⁵

"Measurement & Verification – PSE shall provide detailed descriptions of its measurement & verification (M&V) policies, protocols, guidelines, and processes to the CRAG [Conservation Resources Advisory Group] for review and advice. Additionally, PSE shall provide to the CRAG an estimate of the costs associated with the detailed M&V plan and PSE will maintain activities at levels that are at least commensurate with regional peers."

The document provides detailed descriptions of PSE M&V policies, protocols, guidelines and processes.

<u>Verification of energy efficiency installations</u>: This is conducted in multiple venues through review of documentation, surveys and on-site inspections. To ensure the accuracy of program and measure savings claims, verification activities encompass many different steps, including invoice and calculation reviews, on-site inspections and phone verifications among others.

⁵ Agreed Conditions for Approval of Puget Sound Energy, Inc.'s 2010-2011 Biennial Electric Conservation Targets under RCW 19.285, Docket No. UE-100177.



<u>Verification of energy savings</u>: Energy Efficiency programs have documented procedures in place to fully verify measure savings. Verification procedures described in the Verification Manual vary depending on measure, participant, or program type. Practices documented in the Verification Manual detail expectations for all stakeholders including Program Implementation Staff, program participants and installation contractors. The processes most reflective of day to day functions of the Verification Team are the pre and post-installation inspections described in the Manual.

D. Programs Support

The Programs Support organization, as its name implies, provides critical services to Energy Efficiency program staff. These services allow program staff to focus on achieving cost-effective conservation savings while prudently using ratepayer funds. The Programs Support team's role is particularly critical during Energy Efficiency planning periods, as they facilitate several planning initiatives for program staff, manage the RFP/RFI process, and produce and maintain many Energy Efficiency process manuals. Their role also includes support of other groups within Energy Efficiency, including the Data and Systems Services team, Evaluation, and Rebates Processing. Program Support roles include:

- Biennial and strategic program planning support;
- Customer experience Energy Efficiency program participation surveys;
- Manage and facilitate BCP planning including stakeholder integration and RFP/RFI bidding activities;
- Writing, creating and maintaining Energy Efficiency Manuals and Procedures;
- Provide tools for employee engagement;
- Plan energy efficiency communications, schedule activities and implement OCM activities
- Produce literary compositions, articles, reports presentations or other texts;
- Manage document control, business cases, contracts, applications and invoices related to energy efficiency
- Trade ally support; and
- Best practices and continuous improvement.





E. Trade Ally Support

Trade Ally Support manages PSE membership costs in Energy Efficiency (EE) trade associations. These organizations stand apart from other trade memberships managed in individual Energy Efficiency programs in that they provide comparatively broad-based EE research, training and/or implementation support services.

Trade Ally Support organizations provide education, information and related services for:

- The adoption or expansion of energy-efficiency products, services, and practices; and
- Conducting research toward the development of new, or improved validation or delivery of existing conservation measures, programs and services.

1. Description

The Trade Ally Support line item budgets and tracks only annual membership dues or Energy Efficiency services subscriptions PSE pays to broad-based industry trade and research organizations who perform and support ongoing development and implementation of Residential and Business Energy Management programs. PSE participates in and utilizes the services of many such organizations to support delivery, management, and promotion of energy efficiency services. Utility, customer, and service provider benefits primarily include education and information exchange on end-use technologies, energy legislation, efficiency services, and related industry trends.

Other Trade Ally expenses not related to dues, for example conference attendance by PSE Energy Efficiency staff, are budgeted and tracked with the pertinent efficiency program(s) receiving the benefit.

2. Target Market

Organization memberships budgeted in Trade Ally Support for the 2018-2019 biennium include (but may not be limited to):

- 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).

Table V-1 provides summaries of Energy Efficiency's Trade Ally organizations. The table attributes include a description of the organization ("What is it?"), the nature of the expense ("Why?"), the need for PSE participation ("What for?"), and if there are associated sponsorships or events ("Event/Sponsorship").

 Table V-1: Descriptions of Energy Efficiency Trade Ally Organizations

AESP (Association of Energy Services Professionals)		
What is it?	AESP (Association of Energy Service Professionals) is a trade association promoting the common business interests of Energy Efficiency products and services vendors, contractors, utilities, and related industry stakeholders both nationally and throughout the Puget Sound Region.	
Why?	Annual membership dues payment. Membership dues support the day to day operations and business activities of the organization.	
What for?	This expense is for annual membership dues only; there are no associated sponsorship expenses. AESP membership gives PSE access to valuable services and relationships vital to the implementation of energy efficiency programs and services throughout the Puget Sound region.	
Event/Sponsorship?	Group Membership	
ASE (Alliance to Save Energy)		
ASE (Alliance to Sav	ve Energy)	
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Table V-1, continued

ВОМА		
What is it?	A non-profit commercial industry trade association with the mission of supporting and promoting Energy Efficient businesses and practices in the NW. An import function of BOMA is education un sustainability practices through seminars and classes offered to PSE members.	
Why?	Annual membership dues payment. Membership dues support education in Energy Efficiency	
What for?		
Event/Sponsorship?	Membership dues	
CEE (Consortium for Energy Efficiency)		
What is it?	The Consortium of CEE is the US and Canadian consortium of natural gas and electric efficiency program administrators. They work together to accelerate the development and availability of energy efficient products and services for lasting public benefit. CEE organizes its day-to-day work into committees focused on defining a market approach aimed at more efficient use of regulated energy sources—electricity and natural gas. Committees address specific opportunities for end uses, systems, or structures independent of fuel. CEE members share their diverse perspectives and develop a collective wisdom that leads to strategic national initiatives.	
Why?	CEE continues to be a reliable resource for informing PSE Energy Efficiency planning decisions. PSE has a history of success in participating on CEE subcommittees to identify and promote effective energy efficiency measures and activities, and in CEE online and onsite events to learn about innovative approaches as well as create national visibility for PSE's own successful innovations.	
What for?	Gaining useful information on energy efficient technologies of promise, and on practical program innovations. Participating in CEE-hosted subcommittees, webinars and conferences to exchange information with program administrators with a breadth of experience in the field to discover ways to improve existing programs and develop new ones.	
Event/Sponsorship?	Membership dues	





Table V-1, continued

Energy Solutions Center (ESC)		
What is it?	ESC (Energy Solutions Center) is a trade association promoting the common business interests of Energy Efficiency products and services manufacturers, vendors, contractors, utilities, and related industry stakeholders both nationally and throughout the Puget Sound Region.	
Why?		
What for?	This expense is for annual membership dues only; there are no associated sponsorship expenses. ESC membership gives PSE access to valuable services and relationships vital to the implementation of energy efficiency programs and services throughout the Puget Sound region.	
Event/Sponsorship?	Membership dues	
Electric League		
What is it?	The Electric League is a trade association serving the common business interests of utilities and electrical industry trades throughout the Puget Sound Region, particularly in supporting Energy Efficiency (EE) interests. For example, the Electric League hosts the biannual Powerful Business Conference, annual EE Utility Programs Presentation, and various other EE end-use training workshops for both service providers and consumers.	
Why?	Annual membership dues payment. Membership dues support the day to day operations and business activities of the Electric League.	
What for?	This expense is for annual membership dues only; there are no associated sponsorship expenses. Electric League membership gives PSE access to valuable services and relationships vital to the implementation of energy efficiency programs and services throughout the Puget Sound region.	
Event/Sponsorship?	Membership dues	





Table V-1, continued

NW Energy Efficiency Council (NEEC)		
What is it?	NEEC (NW Energy Efficiency Council) is a trade association promoting the common business interests of Energy Efficiency products and services vendors, contractors, utilities, and related industry stakeholders throughout the Puget Sound Region.	
Why?	Annual membership dues payment. Membership dues support the day to day operations and business activities of the organization.	
What for?	This expense is for annual membership dues only; there are no associated sponsorship expenses. NEEC membership gives PSE access to valuable services and relationships vital to the implementation of energy efficiency programs and services throughout the Puget Sound region.	
Event/Sponsorship?	Membership dues	

F. Contractor Alliance Network

Many Energy Efficiency programs, including those in the Residential Dealer Channel and Business sectors, work in partnership with select contractors to implement large, costly, or complex measures for customers. The Company provides this valuable service as a part of PSE's Contractor Alliance Network (CAN). This strategic trade ally platform allows PSE to efficiently manage and effectively leverage its trade ally relationships to help customers achieve their energy efficiency goals. Many customers often lack the budget, time, and expertise to make energy efficiency decisions. Customers need help navigating the highly technical and costly retrofit process, which often discourages the early replacement of energy-intensive systems.

Customers trust PSE as a key resource in these situations, and the Contractor Alliance Network allows PSE to connect customers with pre-screened, independent trade allies committed to helping them make safe, dependable and efficient energy choices that align with PSE's efficiency programs.

G. Automated Benchmarking System

This 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 usage.



1. Description

MyData is a free web-based tool offered by PSE that allows building owners, managers and operators to track and assess energy consumption of their buildings. By customers registering their property, they will be a part of what is becoming an industry standard and will receive quick and accurate data on a monthly basis for their entire building.

This tool will enable customers to track energy usage for a portfolio of buildings, track the results of energy efficiency projects, develop Energy Star® ratings and comply with state regulations including required reporting in the <u>City of Seattle</u> via Energy Star Portfolio Manager.

2. Target Market

Approximately 75 percent of the whole-building energy usage requests PSE receives come from building owners (or their contractors) that are tracking their energy usage or tracking the results of energy efficiency projects.

H. Energy Advisors

The Energy Advisor Department is a unique, customer solution operation. 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, and in person.

Unlike transaction-based customer care departments, the Energy Advisors provide expertise and deliver solutions tailor-made for customers' homes. The Energy Advisors perform research, conduct analyses, provide resolution, and respond to customer inquiries. They follow-up on requests related to energy efficiency and conservation that inform customers, make suggestions on how customers can reduce their energy use. They represent PSE in an effort to promote and cross-market energy-efficiency products and services by presenting and providing educational materials to employees, organizations and community groups.

Energy Advisors receive training and instruction in departmental procedures, current programs, building science, and customer service. They are expected to use good judgment in independently responding to recurring customer issues and/or complaints.





Unique, difficult or unusual customer service issues are referred to Senior Energy Advisors. Individual Energy Advisors are also located in several PSE Business Offices throughout PSE's service territory to provide direct support for energy-efficiency questions. Customers have access to speak directly to an Energy Advisor through a toll-free number, **1-800-562-1482**, Monday through Friday, 8am to 5pm.

I. Energy Efficient Communities

Energy Efficient Communities (EEC) is a program-support channel to deliver Energy Efficiency program information directly to residential and commercial customers and through partnerships with community organizations and municipalities. The program works to leverage community resources to connect with, educate and move customers to Energy Efficiency program participation.

1. Description

Puget Sound Energy's Energy Efficient Communities channel works to generate participation in PSE's Energy Efficiency programs through direct-to-customer outreach and through partnerships. The team works to discover locally-appropriate ways of engaging with customers by leveraging PSE's resources, community knowledge and partner support.

The EEC team works closely with the Energy Efficiency programs to determine whether a broader partnership with a community organization or a more targeted, direct-to-customer approach is needed, such as a door-to-door initiative. As an outreach team for both residential and commercial programs, the EEC team also works on cross-program promotion, where appropriate.

2. Target Markets

PSE's Energy Efficient Communities channel has staff located in regional offices to provide an improved connection to the multiple community stakeholders that Energy Efficiency serves throughout the service area.

These partnerships provide opportunities to connect directly and indirectly with the residential and commercial markets. This model also helps the staff members learn about the customers in the communities in order to design outreach strategies to encourage program participation. The team centrally plans their general outreach initiatives as a group, but each team member customizes that outreach for their community.



Energy Efficient Communities works closely with the Energy Efficiency program teams to reach out to the underserved markets to deliver consistent programs 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 and community groups, through designing door to door engagements as well as through presentations to the small business community.

They also assist in the design of large scale residential customer outreach initiatives to ensure programs are brought to a variety of customer segments. Door to door initiatives and partnering with community entities provide the opportunity to engage with more customers about the benefits of the Energy Efficiency programs.

The EEC team delivers a robust employee engagement and awareness plan to educate PSE employees on the Energy Efficiency programs to ensure they are incorporating the information into their work with customers. These opportunities leverage other PSE work that is occurring with customers, and therefore improves the customer experience and increases program participation.

J. Customer Digital Experience

PSE's customers expect to receive information and interact with PSE online in the same sophisticated ways they do with other companies. 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.

1. Description

Customer Digital Experience and Market Integration are designed to significantly improve Energy Efficiency's ability to communicate the "how and why" of energy efficiency, using new technologies and engaging interactive methods.

Customer Digital Experience consists of the initiative to make PSE's energyefficiency web tools effective in delivering electricity and natural gas savings. Research has shown that PSE customers are more web-savvy than average and have high expectations when doing business on the web.

Customer Digital Experience also supports interactive content development, enewsletters and other miscellaneous software applications, including online form, database and web hosting services.





These newly-enhanced tools, implemented in 2014 and regularly improved and updated since then, help customers understand the specifics behind their energy usage, show neighbor comparisons (residential customers),⁶ notify customers of higher than usual usage, 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.

Customer Digital Experience also supports interactive content development, enewsletters and the fees for other miscellaneous software applications, such as online form, database and web hosting services, and includes purchases made through shopPSE, funded by the Residential Energy Management Direct-to-Consumer Channel (http://PSE.com/shoppse).

K. Market Integration

Market Integration consists of salary costs of employees working on energy-efficiency marketing platform development and maintenance. This budget category is designed to increase the transparency of the work done on energy-efficiency marketing-related items. This includes the enhancement of online energy-efficiency tools and features, as well as traditional marketing executions that center on promotional channels used across all programs (that is, events, collateral and websites).

L. Events

The Energy Efficiency department participates in community, local, and regional events throughout the year, including home shows, trade shows, seminars, corporate events and community events. The event audience consists of general public, businesses, builder/contractors, multifamily property owners, city leaders, home owner associations, and students/teachers. PSE maintains a presence at these venues to promote its residential and commercial energy efficiency programs in addition to the other communication methods PSE uses to educate customers about its offerings.

⁶ Specific customer details; addresses, names, account information, etc. are rigorously protected. Instead, only general, non-specific comparisons will be provided.



This provides unique opportunities for Energy Efficiency staff to interact directly with customers and discuss a variety of products, programs and services that the department offers. Energy Efficiency staff will also match customer interests and needs with Energy Efficiency programs, as well as bring back customer feedback.

The event strategy team provides specific criteria for event participation that matches overall business and strategy of the programs supporting Energy Efficiency programs with emphasis on presence, affiliation, and relevance. Each event holds a particular value to stakeholders and relates to objectives of PSE Energy Efficiency programs.

The Events team organizes events using an event management data system to improve communication and customer experience. The team assesses event requests and reviews event opportunities in advance with a focus on tactical planning for and vetting events. PSE proactively seeks new audiences to deliver energy efficiency services, using available demographic data to identify harder to reach communities.

PSE employs a third-party vendor to augment its dedicated events staffing to ensure the maximum energy-efficiency exposure. The goal of this is to increase awareness and uptake of PSE Energy Efficiency programs, drive energy savings and reach a broad and diverse audience base through door-to-door, open houses, and community events.

M. Energy Efficiency Brochures

PSE provides brochures and how-to guides on numerous energy efficiency opportunities, including behavioral measures, low-cost equipment, weatherization measures, and improvements, and equipment upgrades. This information includes investment and savings estimates where appropriate.

The brochures provided as part of this program are general energy efficiency in nature, whereas program-specific (for example, business programs, residential heat pumps, or mobile home duct sealing), are budgeted within those specific programs. These brochures are available to customers in paper form and online at the PSE website. Where required by tariff, brochures are included as bill inserts.

N. Education

Schedules E202, G202

The Energy Efficiency Education program provides opportunities to broaden knowledge of conservation and renewable energy, and increase participation in efficiency programs.




PSE's energy education provides a forum for positive customer and community interaction and involvement that will inform, inspire, and empower with the understanding that individual choices do make a difference.

1. Description

PSE coordinates with the Independent Colleges of Washington (ICW) in supporting an annual project proposed and executed by students in the field of energy efficiency. PSE has enhanced the program's goals to increase the number of students participating and numbers within the community that the project reaches. Education Tactics

Continue long standing relationship with Independent Colleges of Washington where students engage in energy efficiency research projects related to improvement in power and energy use.

The Energy Education program also includes an education team who will be focusing on engaging PSE employees to increase their knowledge of energy efficiency programs and products and services through training workshops, presentations at team meetings, and other tactics. By providing employees education on PSE's energy efficiency programs they will be able to provide that information to customers they are working with on a daily basis and therefore increase customers' awareness of its energy efficiency programs.





VI. RESEARCH & COMPLIANCE



A. Conservation Supply Curves

The purpose of the Conservation Supply Curve function is to complete a Conservation Potential Assessment for the company's Integrated Resource Plan (IRP). The Conservation Potential Assessment identifies the amount of energy savings potential that is technically and economically achievable over the 20-year planning horizon of PSE's IRP. The IRP, which is filed every two years, is the basis for PSE's electric and natural gas energy resource acquisition strategy. The IRP analysis is also used to derive the ten-year conservation potential that is the basis for its two-year energy savings targets, as required by WAC 480-109-100(2), to comply with the Washington Energy Independence Act (RCW 19.285).

1. Description

PSE's next IRP and Conservation Potential Assessment are due in 2019. The Company will conduct an assessment of the long-term market potential for electric and natural gas energy savings from energy efficiency and other demand-side resources, covering the twenty year period 2020-2039. PSE anticipates continued use of a consultant to perform the analysis. The budget includes costs to complete the conservation potential assessment and incorporate the results of that assessment in the resource portfolio analysis. This analysis will be a key component for establishing program savings targets in the 2020-2021 biennium.

B. Strategic Planning

The Strategic Planning function conducts a variety of research studies and analyses to support regulatory compliance proceedings and other strategic initiatives.

1. Description

The Strategic Planning function is responsible for providing support and guidance to a variety of regulatory and other strategic initiatives. Responsibilities include regulatory compliance filings, federal and state legislative review, policy analysis, or other strategic efforts related to energy efficiency.

A featured activity in 2018-2019 will be participation in regional efforts to update and enhance customer end use data. This will include participation in a 5-year regional end use load research project that will result in updated end use load shapes and oversampling of the Commercial Building Stock Assessment in PSE's service area.





C. Market Research

Market Research conducts a variety of research studies and analyses to support program design, marketing strategies, and development of effective program promotion and customer communications for energy efficiency.

1. Description

The focus of the Market Research function is on acquiring information about customers that is relevant for the development of energy-efficiency programs, educational materials, and promotional campaigns that will be effective in encouraging program participation.

Through various techniques such as surveys, focus groups, and analysis of existing databases, Market Research provides understanding of customer perceptions, motivations and barriers to adoption of energy-efficient applications and behavior, as well as tracking customer awareness of program offerings and satisfaction with non-program specific education and information services. Market Research is also called upon for analysis of localized characteristics, attitudes, behavior, and energy usage trends, necessitating more geographically targeted research. Market Research expenses are driven by the customized nature of the work and the large sample sizes required in quantitative studies for results to be valid for multiple market segments and geographic areas.

The Market Research Staff works closely with Program Implementation, Marketing, Energy Efficient Communities, and Program Evaluation Staff to identify research needs that support the effective development, delivery, and evaluation of energy efficiency programs. These research needs are then coordinated and leveraged to result in a slate of research projects that are responsive to internal client needs, eliminate duplication of effort, and are cost-efficient.

PSE's conservation market research activities are divided into two basic components:

<u>Baseline Research with Broad Applications</u>: This type of research provides foundational information about PSE customers that will be a common source of knowledge for the general planning and design of all energy efficiency programs and promotional campaigns.



<u>Application-Specific Research</u>: This research is focused on specific programs or promotional initiatives. It includes research that supports specific energy efficiency program promotion and communications campaigns, such as message testing, target markets, and campaign effectiveness studies. Other research efforts will be focused on tracking customer satisfaction with information services, such as the Energy Advisors. Finally, research may be conducted to provide customer input on the design and implementation of specific programs, primarily using qualitative methods such as focus groups.

Market Research has made greater use of online research tools and secondary data sources, which helps to control costs. PSE has improved its internal research capability minimizing the need for external resources, but does purchasing existing demographic data from third-party providers, rather than conducting original research to collect this information.

D. Program Evaluation

PSE Evaluation staff are committed to the evaluation of energy savings and the continual improvement of energy-efficiency service delivery to customers. PSE program implementation teams work together with the Evaluation team to inform the development of evaluation scopes of work. The Evaluation Team then develops and maintains a strategic Evaluation Plan (Exhibit 6), in accordance with the guiding Evaluation Framework (Exhibit 8), ensuring that all programs receive review on a maximum four-year cyclic basis.

Evaluations are conducted by third-party evaluation consultants that are selected by a competitive Request for Proposals (RFP) process. For 2018-2019, PSE will contract with one third-party evaluator for all residential programs and one third-party evaluator for all non-residential programs. This approach will encourage greater efficiency and integration of data and results.

Starting in 2018-2019, PSE will endeavor to evaluate all of its tariffed programs within that two-year period. The level of detail at which each program is evaluated will be determined by prioritizing each program into evaluation tiers. All levels of rigor will be consistent with the principles, objective, and metrics prescribed in the guiding Evaluation Framework (Exhibit 8). In prioritizing programs for evaluation, PSE considers the level of energy savings, significant program changes, results of prior evaluations and whether a program is new or never been evaluated before. Adjustments to the evaluation plan may be made during the biennium, with CRAG review and advice.





For additional information on planned evaluation activity, including initial prioritization of programs for evaluation, please refer to Exhibit 6, 2018-2019 Evaluation Plan.

After an evaluation is completed, members of the EES Program Team participate in the Evaluation Report Response (ERR) process to ensure that evaluation results are implemented in the program. The Program Team completes the ERR, indicating what actions will be taken in response to evaluation findings and recommendations. This ensures a closed-loop system with Evaluation findings and Implementation responses and adjustments being documented in the Source of Savings database. Final evaluation reports with appended ERRs are posted to the Conduit Northwest website (https://conduitnw.org).

PSE frequently shares the results of its evaluations with the RTF to support continuous improvement of measure energy savings values widely used in the region. In addition, PSE monitors the Regional Technical Forum (RTF), NEEA, and the Northwest Research Group (NWRG), as well as directly reaching out to neighboring utilities, for opportunities to collaborate on common evaluation needs.

Evaluation staff continuously look to improve program evaluations, including integration of advanced data analytics (often called EM&V 2.0). EM&V 2.0 combines the principles from the EM&V Framework (Exhibit 8), with specialized software and technology applications to provide more timely feedback and granular results to program implementation teams. To that end, PSE is piloting potential uses of EM&V 2.0. The techniques that will be tested and validated are expected to result in real-time adjustments to programs through early detection of savings trends and quality of measure installation. This pilot effort began in 2017 and will continue into 2018. PSE will apply the lessons learned to build evaluation and verification practices which will be applied to a wider range of applicable programs in 2018-2019.





VII. OTHER ELECTRIC PROGRAMS



A. Customer Connected Solar

Customers that interconnect a qualifying renewable system (solar photovoltaic, small wind, or microhydro) with PSE ("Customer-Generators") are eligible to participate in PSE's Net Metering program (terms of the program are outlined in Schedule 150) and in The WA State Renwable Energy Production Incentive program, as administered by PSE (these terms are outlined in Schedule 151). PSE organizes those programs in the Customer Connected Solar group.

1. Net Metering

Schedule E150

a. Purpose

PSE's Net Metering program provides interconnection services for qualifying customer-generators in accordance with State legislation enacted into law in February 11, 1999 and amended June 8, 2000 (see RCW 80.60).

b. Description

PSE provides interconnection and net metered billing services to qualifying Customer-generators who operate fuel cells, hydroelectric, solar, wind, or biogas generators of no more than 100 kW. Service under this schedule is limited to a total of 11.2 MW of cumulative nameplate generating capacity, of which no less than 5.6 MW of cumulative nameplate generating capacity shall be attributable to renewable energy net metering systems that use as a fuel either solar, wind, hydroelectric power, or biogas from animal waste. In 2014, this threshold moved to 22.4 MW. Customer generation can be used to offset part or all of the Customer-generator's electricity use under Schedules 7 through 49 of Electric Tariff G.

At the time a customer enrolls in the Net Metering program, they are also provided the necessary information to receive annual benefits from the WA State Renewable Energy Production Incentive Program, or Production metering, as described in Schedule 151.

c. Target Market

All customers who are within the Company's service territory and receive electric service under terms of the Company's electric Tariff G.





d. Customer Incentives

No direct customer incentives are provided under the Net Metering tariff. Energy produced by Customer-generator systems directly reduces energy used in the home or business from the grid. When energy generated exceeds home or business electrical loads, the excess energy flowing to PSE is metered and credited to the customer at the retail rate for future use.

The program's year runs May 1 to April 30 of the following year. There is currently no set end date. Any excess credit each month is rolled forward to the following month; however, when the new program year begins May 1, the credit is reset to zero.

2. Production Metering

Schedule 151

a. Purpose

The WA State Renewable Energy Production Incentives, as administered by PSE, provide qualifying Customer-generators with production payments in accordance with State legislation SB 5939 as PSE receives tax credits for renewable production payments, as outlined in RCW 82.16.

b. Description

Production Metering is operated in conjunction with, and in addition to, the Net Metering program. At the time a customer enrolls in the Net Metering program, they are also provided the necessary information to receive annual benefits from Production Metering when enrolling with a qualifying renewable energy technology. The annual payment amount is based on requirements outlined in WAC 458-20-273.

c. Target Market

All qualified net metered customers, under terms of Schedule 150 and all qualifying Schedule 91 customers.



d. Customer Incentives

Once a year customers certified by the state will bepaid for all power generated at the rates specified in RCW 82.16. PSE will report to WSU Extension Energy (Administrator) – on all participating customer production for the reporting year, which runs from July 1st through June 30th. The Administrator will calculate each customer's production incentive payment, and then report to PSE how much the customer should be paid. PSE will pay the customer within 90 days of receipt of the information.

e. Marketing Plan

When customers interconnect for net metering they are also encouraged to participate in the production metering program. PSE notifies the customer and assists them with the paperwork process that is required by the state to receive a payment. PSE has a brochure for Customer Renewables used at various events.

The Energy Advisors provide basic information to customers calling to inquire about renewable energy generation. Information on net metering is also accessible from the Savings & Energy Center navigation header at pse.com, or by going directly to PSE.com/renewables.

Renewable energy businesses and organizations such as Solar Washington and Washington State University Energy Programs normally make customers aware of the new metering program when they inquire about renewable energy generators.





VIII. GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

Unless otherwise noted in a specific Conservation Schedule, the following commonlyused terms, used throughout this document have the below noted meanings:

AIA	American Institute of Architect
ASHRAE	American Society of Heating, Refrigerating, and Air- Conditioning Engineers
BOMA	Building Owners and Managers Association
BPA	Bonneville Power Administration
СНР	Combined Heat & Power
CMS	Customer Management System
Cost Element	Also referred to as account numbers. Cost element groups typically include; labor, overhead, employee expenses, miscellaneous expenses, materials, etc.
CRAG	Conservation Resource Advisory Group
DDC	Design Development and Construction
DHW	Domestic Hot Water
Direct Install Measure	A conservation measure that is installed by a PSE representative—rather than a PSE customer—into a qualifying structure.
ECM	Electronically Commutated Motor





Definitions and Acronyms, continued

HID	High Intensity Discharge (related to lighting)
HVAC	Heating, Ventilation and Air Conditioning
IRP	Integrated Resource Plan. PSE's two-year view of 20-year resource needs and how the Company will meet those needs.
kWh	Kilowatt Hour
MBA	Master Builders' Association
NEMA	National Electrical Manufacturers Association
O&M	Operations and Maintenance
Order Number	An eight-digit accounting number, used to track expenditures. FERC rules require that expenditures associated with energy conservation begin with a 1823nnnn (where "n" is another number). This is the most detailed view of accounting for a program's expenditures. Within an order number, cost elements account for the specifics of those expenditures, as explained above.
TRC	Total Resource Cost
UC	Utility Cost
ULI	Urban Land Institute
USGBC	U.S. Green Building Council
WAMOA	Washington Association of Maintenance and Operations Administrators

