



Exhibit 3

2018-2019
Program Details





Table of Contents

I. INTRODUCTION	1
A. ASSOCIATED DOCUMENTS	1
B. PROGRAM DETAILS	2
1. <i>Program Detail Revisions</i>	2
2. <i>Program Details Organization</i>	2
C. DOCUMENT CONTENTS	3
II. GENERAL GUIDELINES FOR MEASURES, INCENTIVES AND ELIGIBILITY	4
III. RESIDENTIAL ENERGY MANAGEMENT	7
A. LOW INCOME WEATHERIZATION	8
1. <i>Purpose</i>	8
2. <i>Description</i>	8
3. <i>The Customer Experience</i>	11
4. <i>Opportunities for Program Awareness</i>	11
5. <i>Customer Incentives Overview</i>	12
6. <i>Electric Funding</i>	13
7. <i>Offerings Unique to Structure Type</i>	16
8. <i>Natural Gas Funding</i>	17
9. <i>Offerings Unique to Structure Type</i>	18
10. <i>Energy-Related Repairs Funding</i>	18
11. <i>Target Market</i>	19
12. <i>Marketing and Outreach Plan</i>	19
B. SINGLE FAMILY EXISTING	23
1. <i>Purpose</i>	23
2. <i>Description</i>	23
3. <i>Customer Experience</i>	23
C. DIRECT TO CONSUMER CHANNEL	25
1. <i>Description: Residential Direct to Consumer Programs</i>	25
2. <i>Direct to Consumer Electric Service</i>	28
3. <i>Marketing and Outreach Plan</i>	31

Exhibit 3: Program Details

D. DEALER CHANNEL36

 1. Purpose36

 2. Description: Dealer Channel Programs 36

 3. Customer Incentives.....36

 4. Dealer Channel Electric Service.....37

 5. Marketing and Outreach Plan41

E. RESIDENTIAL NEW CONSTRUCTION46

 1. Single Family New Construction46

 2. Manufactured Home New Construction.....53

F. MULTIFAMILY NEW CONSTRUCTION58

 1. Purpose58

 2. Description.....59

 3. Customer Incentives.....60

 4. Target Market62

 5. Multifamily New Construction Marketing and Outreach Plan62

G. MULTIFAMILY RETROFIT65

 1. Purpose65

 2. Description.....65

 3. Customer Eligibility.....66

 4. Customer Incentives.....67

 5. Target Market72

 6. Marketing and Outreach Plan72

H. RESIDENTIAL PILOTS.....77

 1. Single Family Rental.....77

 2. Low Income Weatherization Mobile Home Replacement77

 3. Pilot-Analogous Initiatives77

IV. BUSINESS ENERGY MANAGEMENT.....79

A. PILOTS.....80

 1. Pay for Performance Pilot80

 2. Commercial Midstream.....80

 3. Pilot-Analogous Initiatives80

B. COMMERCIAL/INDUSTRIAL RETROFIT81

 1. Purpose81

 2. Description.....81

 3. Customer Incentives.....82

 4. Industrial System Optimization Program (ISOP)89

 5. Target Market90

 6. Marketing and Outreach Plan91



- C. COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION93
 - 1. Purpose93
 - 2. Description..... 93
 - 3. Customer Incentives.....94
 - 4. Target Market 99
 - 5. Marketing and Outreach Plan99
- D. COMMERCIAL STRATEGIC ENERGY MANAGEMENT103
 - 1. Purpose103
 - 2. Description.....103
 - 3. Customer Incentives.....105
 - 4. Marketing and Outreach Plan111
- E. LARGE POWER USER/SELF DIRECTED114
 - 1. Purpose114
 - 2. Description.....114
 - 3. Eligibility115
 - 4. Customer Incentives Overview.....115
 - 5. Target Market117
 - 6. Marketing and Outreach Plan117
- F. ENERGY EFFICIENT TECHNOLOGY EVALUATION118
 - 1. Technology Evaluation Overview118
- G. COMMERCIAL REBATES120
 - 1. Purpose120
 - 2. Description.....120
 - 3. Customer Incentives.....121
 - 4. Direct-Install Program131
 - 5. Target Market135
 - 6. Marketing and Outreach Plan136
- V. REGIONAL PROGRAMS141**
 - A. NORTHWEST ENERGY EFFICIENCY ALLIANCE.....142
 - 1. Description.....142
 - B. PRODUCTION AND DISTRIBUTION EFFICIENCY143
 - 1. Purpose143
 - 2. Description.....143
- VI. PORTFOLIO SUPPORT145**
 - A. DATA AND SYSTEMS SERVICES146
 - B. REBATES PROCESSING146
 - 1. Description.....146
 - 2. Target Markets.....147

Exhibit 3: Program Details

C.	VERIFICATION TEAM.....	147
1.	<i>Verification Team Guidelines</i>	147
D.	PROGRAMS SUPPORT.....	148
E.	TRADE ALLY SUPPORT.....	149
1.	<i>Description</i>	149
2.	<i>Target Market</i>	149
F.	CONTRACTOR ALLIANCE NETWORK	153
G.	AUTOMATED BENCHMARKING SYSTEM	153
1.	<i>Description</i>	154
2.	<i>Target Market</i>	154
H.	ENERGY ADVISORS	154
I.	ENERGY EFFICIENT COMMUNITIES	155
1.	<i>Description</i>	155
2.	<i>Target Markets</i>	155
J.	CUSTOMER DIGITAL EXPERIENCE	156
1.	<i>Description</i>	156
K.	CUSTOMER AWARENESS TOOLS.....	157
1.	<i>Unusual Usage Alerts (UUA)</i>	157
2.	<i>My Energy Usage</i>	157
3.	<i>Seasonal Readiness Emails (SRE)</i>	158
4.	<i>Customer Engagement Tracking (CET)</i>	158
L.	SHOPPSE	158
M.	MARKET INTEGRATION.....	158
N.	EVENTS	159
O.	ENERGY EFFICIENCY BROCHURES	159
P.	EDUCATION.....	160
1.	<i>Description</i>	160
VII.	RESEARCH & COMPLIANCE.....	163
A.	CONSERVATION SUPPLY CURVES.....	163
1.	<i>Description</i>	163
B.	STRATEGIC PLANNING	164
1.	<i>Description</i>	164
C.	MARKET RESEARCH.....	165
1.	<i>Description</i>	165
D.	PROGRAM EVALUATION.....	166



VIII. OTHER ELECTRIC PROGRAMS.....	169
A. CUSTOMER CONNECTED SOLAR.....	170
1. <i>Net Metering</i>	170
2. <i>Production Metering</i>	171
<i>Customer-Generated Power</i>	172
<i>Price per kWh</i>	172
IX. GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS.....	175

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. GENERAL GUIDELINES FOR MEASURES, INCENTIVES AND ELIGIBILITY

1. Definitions and terms used throughout this document are governed by the Company's Electric Tariff G and Natural Gas Tariff. Where there is a conflict, the Tariff definition shall prevail.
2. Specific terms and conditions are found on the applicable incentive forms, grant documents, rebate application forms and similar documents available from the Company. Some measures noted in this document apply only to a particular customer type or structure type. Some structure types do not have individual measure/incentives available; rather, an incentive may be applied to the entire qualifying structure. Please thoroughly read the incentive terms and conditions before investing in an energy efficiency measure.
3. Some incentive payments noted in this document may be divided in a manner consistent with the Company's program objectives. In some cases, this division may be between the qualifying party or parties receiving the measure. For example, an installing contractor may receive a portion of an indicated incentive amount, with the end-use customer receiving the balance of the indicated amount. Qualifying parties may include, but are not limited to, manufacturers, retailers, distributors, owners of structures, tenants, customers, general contractors, verifiers, approved Washington State Agencies or similar entities.
4. The term Maximum Amount, noted in some programs, represents the total amount of funding available per indicated measure, household, dwelling unit, eligible party or parties or structure. Incentive amounts may vary, depending on market conditions, funding availability, energy efficiency level of the installed product(s) or measure, eligibility of the party installing the measure or other similar conditions.
5. At the Company's discretion, and based on changing market conditions, cost-effectiveness and program objectives, incentive amounts may vary from the indicated Maximum Incentive Amount from time to time. The Company may implement limited-time offers, special performance incentives for field forces (sometimes referred to as SPIFFs or SPIFs), temporary promotions, purchasing of products directly for resale, or other adjustments to incentives.

These adjustments will continue to be based on regionally-accepted energy savings estimates and incremental efficiency measure costs. These adjustments may be noted on the PSE.com website, press releases, advertisements, or other media. It is always a good idea to consult an energy advisor at 1 800 562-1482 if you have questions.

6. The Company's energy advisors are available to answer specific energy-efficiency questions, Monday through Friday, 8am to 5pm. Many rebate forms and additional program information are also available via the Company's website:

<http://pse.com/savingsandenergycenter/Pages/default.aspx>

7. Many of the indicated measures require the services of or installation by a professional contractor. Before engaging a contractor, it is important to understand the terms and conditions of the measures for which you may apply and ensure that the contractor meets the Company's qualifying standards.

Generally, contractor qualifications include, but are not limited to:

- Licensed, bonded and insured in the State of Washington.
 - Willing to comply with training and inspection by the Company.
8. Some of the indicated measures have very specific requirements that must be satisfied in order to qualify for the indicated incentive. These include, but are not limited to: structural measures (insulation, windows, etc.), HVAC applications (heat pumps, air handlers, etc.), plumbing fixtures (water heaters, boilers, etc.) and so on. Qualifications listed in this document as a part of the measure description are of a general nature only, and are intended to provide an overview for the customer. Additional information is available on PSE.com, via an energy advisor (1-800-562-1482) and is provided in the incentive application form.

Prior to committing to a potentially large investment, (a heat pump, water heater, windows, insulation, etc.) **it is recommended that customers visit PSE.com or call an energy advisor** to obtain the complete list of qualifications for the measure being considered.

Exhibit 3: Program Details

9. Customers, eligible parties, owners or tenants with applicable owner permission assume all liabilities associated with contracting, work performance, ensuring applicable permits are obtained and paying independent contractors. The Company may provide contractor referral services for measures.
10. General terms and requirements for incentive qualification include, but are not limited to:
 - Original purchase receipt or invoice, indicating the date of purchase,
 - Address (the physical location) of where the measure is being installed,
 - Name of person(s) business or entity name claiming the incentive,
 - The structure must be receiving (or will be receiving in the case of new construction) electric service or bundled natural gas service from the Company. Certain service types may be ineligible for conservation rebates, grants, or remuneration. Please consult with the specific terms and conditions of the measure about which you are interested, consult PSE.com, call an energy advisor (1-800-562-1482), or review the incentive application form.
11. PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program's measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential. PSE may offer or withdraw this measures at its discretion.



III. 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*. PSE discusses the remainder of the Residential Business-to-Business programs (Multifamily Retrofit and Residential New Construction) on page 46.

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.

Exhibit 3: Program Details

b. 2017 General Rate Case Settlement Stipulation

Beginning January 1, 2018, PSE will provide an additional amount of \$2 million to facilitate project support activities. The funding is consistent with terms outlined in PSE's 2017 General Rate Case (GRC) Settlement Stipulation Agreement.³

This funding will be in effect until June 30, 2019. PSE will provide reimbursement to partnering agencies of up to 30 percent of project that agencies enter in PSE's LIW online portal for project support. This amount is incremental to the funding that PSE already provides as a part of its standard services (install measures, protect health and safety, and protect the integrity of the installed measure), and will continue to provide through the 2018-2019 biennium.

There is no cap on low-income funding; if agencies provide cost-effective projects beyond PSE's forecasted biennial total, PSE will continue funding the standard activities.

c. 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.

d. Green Power Community Support Grants

In 2019 PSE will be leveraging \$250,000 of State funds through the Community Energy Efficiency Program (CEEP) with PSE Customer Connected Solar (CCS) program dollars to pilot multi-family solar installations with the intent to identify how best to leverage multiple funding sources in advance of the Microsoft Contract dollars. To that end, PSE will distribute 5-7 grants of approximately \$75,000 to Community Action Agencies currently contracted with PSE to implement the Schedule 201 Low Income Weatherization program. The grants will be awarded in November 2018 and installations will be complete by June 30, 2019.

³ Dockets UE-170033 and UG-170034.

e. Mobile Home Replacement Program (MHRP) Pilot

In 2018-2019, PSE is partnering with the Community Energy Efficiency Program (CEEP) to leverage \$300,000 in State funds along with utility incentives to pilot a Mobile Home Replacement Program (MHRP) for income eligible Mobile Home customers living in structures that are candidates for replacement. Five installations will be completed by June 30, 2019 with the goal of identifying a sustainable funding model post-pilot.

3. The Customer Experience

Low-income customers, including owners and tenants of single family, multifamily, and mobile homes that meet federal poverty guidelines issued by The Washington State Department of Commerce and receive 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 project data to PSE.

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 will continue to increase its service to the Mobile Home Sector through direct marketing campaigns and coordinated efforts with Community Action Agencies to identify enhanced methods of program delivery.

5. Customer Incentives Overview

a. All Structures

Measures apply to existing single-family, multifamily and mobile home 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 low-income 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. The majority of measure funding falls into three categories: paid per *square or linear foot* (attic insulation, for instance), per *measure* (for example, an LED bulb), per *structure* (for example, one furnace, or water heater per home).

f. Retrofit – Multi-Family

Prescriptive incentives will be applied to measures installed within units of multi-family 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. Electric Funding

g. Per-Structure Basis

Measures	Maximum Payment Amount		
	Single Family	Multifamily	Mobile Home
Electronic Thermostats (Replacement of bi-metal thermostats with electronic thermostats. Line voltage thermostats only.)	\$67.50	\$67.50	-\$67.50
Duct Sealing with other measures (unconditioned spaces)	\$500.00	-	\$500.00
Water Heater Pipe Insulation (3 feet, or more, with minimum thermal value of R-3)	\$20.00	\$20.00	\$20.00
Refrigerator Replacement <i>(In accordance with US DOE protocol and Commerce requirements)</i>	\$545.00	\$545.00	\$545.00
Heat Pump Water Heater Tier 2	\$900.00	\$900.00	\$900.00
Heat Pump Water Heater Tier 3	\$1,369.00	\$1,369.00	\$1,369.00
Ductless Heat Pump (AHRI certified, inverter technology, minimum 1.0 ton)	\$4,282.55	-	\$3,988.40
Energy Star Whole House Fan	\$708.10	\$708.10	\$730.01

Exhibit 3: Program Details

h. LIW Electric Per Square-Foot Basis

Measures	Description			Maximum Payment Amount	
Air Sealing Multifamily Structures	Dense Pack Walls and Rim Joists			\$2.75 per sq. ft.	
	Attic and/or Crawl Space			\$0.95 per sq. ft.	
	Door Kits			\$100.00	
	Recessed Can Covers			\$40.00	
	Energy Star® Bathroom Fans (DC Motor)			\$708.00	
	Bathroom Fan Timers			\$50.00	
Air Sealing (Per CFM50 Reduction)	-	-	\$1.32	-	\$1.15
Ceiling Insulation	0	19	-	\$1.42	-
	0	22	-	-	\$1.55
	0	30			2.03
	0	38	\$2.43	\$1.92	-
	11	38	\$1.59	\$1.59	-
	19	38	\$1.29	\$1.29	-
	0	49	\$2.43	\$2.43	-
	11	49	\$1.82	-	-
	19	49	-	\$1.82	-
Duct Insulation	0	11	\$6.46	\$6.46	-
Floor Insulation	0	19	\$1.87	\$1.87	-
	0	22	-	-	\$2.37
	0	30	\$2.20	\$2.20	\$2.70
	11	22	-	-	\$1.84
	11	30	-	\$1.13	-

LIW Electric Per square-foot basis, continued

Measures	R-Existing	R-New	Maximum Payment Amount		
			Single Family	Multifamily	Mobile Home
Wall Insulation	0	11	\$2.75	\$2.75	\$2.75
Windows	Single pane	U-value 0.30	\$20.50	\$20.50	\$20.50
	Double pane	U-value 0.30	\$20.50	\$20.50	\$20.50
	Single pane	U-value 0.25	\$24.10	\$24.10	-
	Double pane	U-value 0.25	24.10	\$24.10	-

i. LIW Electric Per-Measure Basis

Measures	Maximum Payment Amount		
	Single Family	Multifamily	Mobile Home
Energy Star LED A-Lamp	\$11.76	\$11.76	\$11.76
Energy Star LED BR-30 Lamp	\$11.76	\$11.76	-
Energy Star LED Candelabra Lamp	\$11.76	\$11.76	-
Energy Star Globe	\$11.76	\$11.76	\$11.76
Energy Star T-8	-	\$11.76	-
Energy-efficient Shower Head, 1.5 GPM	\$40.50	\$40.50	\$40.50
Faucet Aerator, 1.5 GPM	\$11.35	\$11.35	\$11.35
Web-Enabled Thermostat	145.28	145.28	

Exhibit 3: Program Details

LIW electric per-measure basis offerings, continued

	Measures	Maximum Payment Amount		
		Single Family	Multifamily	Mobile Home
Mobile Homes	Pre-1976 Single to Single Wide Replacement			\$13,800.00
	Pre-1976 Double to Double Wide Replacement			\$14,300.00
	Pre-1976 Double to Single Wide Replacement			\$17,750.00
	1976-1994 Single to Single Wide Replacement			\$11,600.00
	1976-1994 Double to Double Wide Replacement			\$12,650.00
	1976-1994 Double to Single Wide Replacement			\$16,000.00

7. Offerings Unique to Structure Type

a. Single Family, Multi Family, Mobile Home

- Savings to Investment Ratio (SIR) Measure Upgrades, calculated incentive *

* Conservation measures that are cost effective consistent with the *Weatherization Manual*

8. Natural Gas Funding

b. Per Structure-Basis Savings

Measure	Maximum Payment Amount		
	Single Family	Multifamily	Mobile Home
Duct Sealing (unconditioned spaces)	\$500.00	-	\$500.00
Water Heater Pipe Insulation (3 feet with minimum thermal value of R-3)	\$20.00	\$20.00	\$20.00
Energy Star® qualified Gas Furnace or equivalent	\$4,290.00	\$4,290.00	-
Integrated Space & Water Heating	\$1,526.00	\$1,144.00	-
Structure Sealing (Per CFM ₅₀ Reduction)	\$1.32	-	\$1.15

c. LIW Natural Gas Per Square-Foot Basis

Measures	R-Existing	R-New	Maximum Payment Amount		
			Single Family	Multifamily	Mobile Home
Ceiling Insulation	0	30	-	-	\$2.03
	0	38	\$2.43	\$1.92	-
	11	38	\$1.59		-
	0	49	\$2.43	\$2.14	
	11	49	\$1.82		
Duct Insulation	0	11	\$6.46	\$6.46	-
Floor Insulation	0	22	-	-	\$2.37
	0	30	\$2.14	\$2.20	\$2.70
Wall Insulation	0	11	\$2.75	\$2.20	\$2.75

Exhibit 3: Program Details

d. LIW Natural Gas Per-Measure Basis

Measure	Maximum Payment Amount		
	Single Family	Multifamily	Mobile Home
Energy-efficient Shower Head, 1.5 GPM	\$40.50	\$40.50	\$40.50
Faucet Aerator, 1.5 GPM	\$11.35	\$11.35	\$11.35
Web-Enabled Thermostat	145.28	145.28	

9. Offerings Unique to Structure Type

e. Multi Family, Existing

- Common Area Upgrades, calculated incentive⁴
 - Heating Upgrade
 - Solar Pool Heater
 - Solar Water Heater
 - Solar Space Heat

10. Energy-Related Repairs Funding

f. All Structures & Fuel Types

Measures

Health and Safety Repairs (including, but not limited to):

- Electrical safety inspection and repairs
- Extermination of pests, insects or rodents
- Mold/mildew abatement
- Installation of carbon monoxide monitors in homes with natural gas

⁴ Incentives will be evaluated using currently accepted PSE commercial engineering calculations. Based on cost and savings analysis, project payment based on PSE Cost Effective Standards.

Weatherization-Related Repairs (including, but not limited to):

- Roof repair
- Plumbing repair
- Mobile home skirt repair
- Ground Cover

Ventilation

- Installation of bathroom and kitchen ventilation fans
- Crawlspace and attic ventilation

Furnace/Water Heater Repair, Maintenance, or Replacement**Energy Education**

- In-unit and group consultations
- Leave-behind information in units and homes

11. 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.

12. 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 and increase direct marketing to the Mobile Home Sector. The lessons PSE can learn in how best to communicate with and recruit participation in these customer segments can inform expanded outreach to other hard-to-reach customer segments going forward.

Exhibit 3: Program Details

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:
 - Food Banks
 - Social service events
- Provide cross channel promotional opportunities:
 - 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.

Exhibit 3: Program Details

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 Experience

a. Eligibility

A manufacturer, retailer, distributor, equipment supplier, contractor or agent acting on behalf of responsible party of service, the customer or tenant with applicable owner authorization, of an existing single-family structure receiving electricity or natural gas through a PSE residential Schedule; Rates 7 (including 17, 27, 37 and 47), 8, 11 and 12.

Exhibit 3: Program Details

Single Family Residences include structures with four or less single-family units that are attached by a contiguous roofline and manufactured or factory built homes (permanently sited). Single Family Residences that are within a multi-family campus as defined in electric and gas Schedules 217 and 218 of this Tariff, and structures under construction are ineligible for this program.

One way that PSE advances the educational value of conservation and energy efficient program participation is to provide complimentary engagement LED bulbs, energy-efficient showerheads, and/or faucet aerators as a part of home shows, community events, retail promotions or other conservation-focused events. PSE also provides consumer products, such as LED bulbs and showerheads, for sale at shopPSE:

<https://shop.pse.com/>

Pricing may be different than the incentive amounts noted in the following measure tables.

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, such as sound bars and other efficient products, that PSE recommends but does not directly incentivize, through PSE's partnership with NEEA and the Regional Product Portfolio.
- Appliances—including refrigerators, electric dryers, clothes washers, and heat pump dryers.
- 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.
- Web Enabled Thermostats
- 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, tankless 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 efficiency standards or State codes.

C. Direct to Consumer Channel

The Direct to Consumer Channel manages several programs—most of which are consumer-oriented—that includes, but is not limited to; refrigerator decommissioning, showerheads, appliances, and of course, energy efficient lighting. The Channel focuses on services targeted to a wide variety of retail and manufacturer entities, which includes online and 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 are designed to ensure that customers have access to a wide variety of efficient product options. The Direct to Consumer Programs provide 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 maintaining 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.

Exhibit 3: Program Details

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.

Commercial lighting retail incentives are offered through the Lighting To Go program. Lighting To Go follows a similar programmatic format to residential retail lighting. More detailed program discussions are in the Business Energy Management section, Schedules E262.

g. 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. In 2019, to maintain cost-effectiveness, PSE is adjusting eligibility to require that recycled unit be manufactured in 1992 or earlier.

h. 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 continues to offer the measure in 2018-2019.

i. Clothes Washers and Electric Dryers

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 part of PSE's standard appliance rebate portfolio in 2018 and 2019.

For 2019 the Energy Star refrigerator and top load clothes washer measures were determined to not be cost effective and have been removed from the standard appliance portfolio offerings.

j. 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 was expanded to accommodate the approximately 99,000 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.

k. Web-Enabled Thermostats

PSE's web enabled thermostat program will continue through 2019. Adjustments have been made to the measure life, measure cost, and energy savings to reflect new research on savings and market prices for these units. PSE continues to add new Energy Star®-qualified manufacturers who meet its product functionality requirements and have the ability to verify customer connectivity.

Exhibit 3: Program Details

I. Showerheads

PSE offers instant incentives on WaterSense® labeled showerheads 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 years.

m. Faucet Aerators

PSE continues to offer WaterSense® labeled faucets and faucet aerators to customers. 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.

The faucet and aerator measure savings values were deemed by PSE until 2019. The RTF released its own research and savings value for aerators in August 2018. PSE will adopt the new value for savings claims in 2019. Based on the new savings values, faucets were determined as not cost effective and removed from the portfolio. Only aerator measures will be incentivized in 2019.

2. Direct to Consumer Electric Service

PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program's measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential.

For the winter season of 2018-2019, PSE will be running a winter savings web enabled thermostat pilot in partnership with Nest. Nest will provide PSE with a thermostat optimization solution that will facilitate automated changes to End Users' schedules to drive energy savings called the Seasonal Savings Pilot Program. PSE will evaluate the savings and impact of the program to determine if it would be beneficial to pursue as an offering in the Direct to Consumer portfolio.

PSE may offer or withdraw these measures at its discretion.

Category	Measure	Maximum Incentive Amount Each
Appliances	Energy Star® Clothes Washer	\$50.00
	Energy Star Dryer	\$50.00
	Energy Star® Heat Pump Clothes Dryer (greater than or equal to 3.40 UCEF)	\$100.00
	Refrigerator or Freezer Decommissioning for units manufactured in 1992 or earlier (working condition, greater than or equal to 10 cubic feet.)	Free pick-up and recycling for eligible customers. Plus up to \$50.00 to eligible customers.
Controls	Web-Enabled Thermostat	\$150.00
Lighting	CFL bulb recycling	Free to customers at select business locations
	Energy Star® Criteria TLED Fixture	\$10.00
	LED Bulbs including A-Line, Reflector, TLED, MR-16, Candelabra, Globe and other specialty LED bulbs	\$5.00
	Energy Star® criteria LED Indoor Fixture, including Reflector retrofit kit	\$10.00
	Energy Star® criteria LED Outdoor Fixture	\$15.00
	LED Bulbs	Leave behind/Mail-by-Request/Direct install/Engagement. No cost to eligible customers.
Reporting	Home Energy Reports	Direct mail to program participants. No cost to customers.

Exhibit 3: Program Details

Direct to Consumer Electric Measures, continued

Category	Measure	Maximum Incentive Amount Each
Water Heating	2.0 gallon per minute or less showerhead and ShowerStart Adaptor	\$20.00
	2.0 gallon per minute or less showerhead	Leave behind/Mail-by-Request/Direct install/Engagement. No cost to eligible customers.
	Faucet Aerator 1.5 gallon per minute or less	Leave behind/Mail-by-Request/Direct install/Engagement. No cost to eligible customers.
	Faucet Aerator 1.5 gallon per minute or less	\$2.00

n. Direct to Consumer Natural Gas Service

PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program's measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential.

PSE may offer or withdraw these measures at its discretion.

Category	Measure	Maximum Incentive Amount Each
Controls	Web-Enabled Thermostat	\$150.00
Reporting	Home Energy Reports	Direct mail to program participants. No cost to customers.
Water Heating	2.0 gallon per minute or less showerhead and ShowerStart Adaptor	\$20.00
	2.0 gallon per minute or less showerhead	Leave behind/Mail-by-request/Direct install/Engagement No cost to eligible customers.
	Faucet Aerator 1.5 gallon per minute or less	\$2.00
	Faucet Aerator 1.5 gallon per minute or less	Leave behind/Mail-by-request/Direct install/Engagement No cost to eligible customers.

3. Marketing and Outreach Plan

The Direct to Consumer Channel offers instant discounts and rebates on energy-efficient 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, self-service 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.

Exhibit 3: Program Details

- **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, and 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 in-store, 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 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.

Exhibit 3: Program Details

- 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-of-sale 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-of-purchase signage.
- Encourage customers to partake in free showerhead offer via shopPSE.
- Work in partnership with city utility districts to offer low-cost/no-cost high-efficiency 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 energy assessments. 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 third party Home Energy Assessment Specialists acting on behalf of PSE. The program is intended to increase the awareness of how a participating customer's home consumes energy and identify cost-effective ways to use less. Additionally, customers benefit from instant energy savings from the direct installation or leave-behind of high-efficiency products to include, but not limited to, light bulbs, showerheads, and faucet aerators.

o. 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.

p. 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. A list of all requirements for incentive eligibility and participation can be found on individual incentive or program application forms.

PSE's Energy Efficiency department 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. Dealer Channel Electric Service

PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program's measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential.

Exhibit 3: Program Details

PSE may offer or withdraw these measures at its discretion.

Dealer Channel Electric Service

Category	Measure	Maximum Incentive Amount Each	
Assessment	Home Energy Assessment	Direct install and leave-behind. No cost to eligible customers	
	Home Energy Assessment – Manufactured Home	Direct install and leave-behind. No cost to eligible customers	
	LED bulbs: various	Direct install No cost to eligible customers	
	Showerheads: 1.5 gpm	Leave behind No cost to eligible customers	
	Aerators: 1.0 gpm or 1.5 gpm	Leave behind No cost to eligible customers	
Heating	Heat Pumps	Unitary Heat Pump Rebate = 10.0 HSPF, 16 SEER	\$800.00
		Ductless Heat pump Code Upgrade	\$500.00
		Ductless Heat Pumps using inverter technology Site built Homes	\$800.00
		Ductless Heat Pumps in Manufactured Homes	\$1,200.00
		Energy Star® Geothermal Heat Pump	\$1,500.00
		Forced-air furnace to Heat Pump Conversion (Site Built Homes) 8.5 HSPF, 16 SEER	\$1,500.00
		Forced-air furnace to Heat Pump Conversion (Manufactured Homes) 8.0 HSPF, 14 SEER	\$1,500.00
		Heat Pump Sizing & Lock out Controls	\$300.00
Water Heating	NEEA Northern Climate Specs Heat Pump Water Heater - Tier 2	\$500.00	
	NEEA Northern Climate Specs Heat Pump Water Heater – Tier 3 or equal to .95 EF)	\$500.00	

Dealer Channel Electric Service, continued

Category	Measure	Maximum Incentive Amount Each
Weatherization	Attic Insulation (R-0 to R-49)	Up to \$600.00 per dwelling unit
	Attic Insulation (R-11 to R-49)	Up to \$600.00 per dwelling unit
	Floor Insulation (R-0 to R-30)	Up to \$200.00 per dwelling unit
	Wall Insulation (R-0 to R-13)	Up to \$400.00 per dwelling unit
	Whole House Air Sealing	Up to \$350.00 per dwelling unit
	Prescriptive Air Sealing – attic and crawl space	Up to \$200.00 per dwelling unit
	Prescriptive Duct Sealing and Insulation	Up to \$400.00 per dwelling unit
	Prescriptive Duct Sealing Only	Up to \$300.00/dwelling unit
	Energy Star Whole House Ventilation	Up to \$150.00 per unit
	Home Performance with Energy Star Rebate	Up to \$400.00 per dwelling unit
	Floor Insulation R-0 to R-22 – Manufactured Home	Up to \$600.00/dwelling unit
	Prescriptive Duct Sealing – Single Wide – Manufactured Home	Up to \$200.00/dwelling unit
	Prescriptive Duct Sealing – Double/Triple Wide – Manufactured Home	Up to \$400.00/dwelling unit
Windows	Upgrade single-pane wood or metal frame windows to a 0.30 U-factor or better.	\$50.00 per window, up to \$750.00 per structure
	Upgrade single-pane with wood or metal frame windows to a 0.30 U-factor or better – Manufactured Home	\$50.00 per window, up to \$750.00 per structure

Exhibit 3: Program Details

Specific requirements for Dealer Channel Electric Incentives

- Some structural, HVAC and water heat measures require qualified contractor installation in order to be eligible for the indicated incentive.

b. Dealer Channel Natural Gas Service

The following table provides natural gas measures offered through the Dealer Channel.

Category	Measure	Maximum Incentive Amount Each
Assessment	Home Energy Assessment	Direct install, leave-behind, mail-by-request No charge to eligible customers
	Showerheads: 1.0 gpm	Leave behind No charge to eligible customers
	Aerators: 1.0 gpm or 1.5 gpm	Leave behind No charge to eligible customers
Heating	Energy Star® qualified Gas Furnace, 95% AFUE	\$250.00
	Energy Star® qualified Boilers (greater than or equal to 95% AFUE)	\$350.00
	Integrated Space/Water Heating Systems with Energy Star® Tankless or Energy Star® Boiler	\$800.00
Water Heating	.67 EF Tank Water Heater	\$50.00
	.91 Tankless Water Heater	\$250.00

Dealer Channel Natural Gas Service, continued

Category	Measure	Maximum Incentive Amount Each
Weatherization	Whole-House Air Sealing	Up to \$350.00/dwelling unit
	Prescriptive Duct Sealing and Insulation	Up to \$400.00/dwelling unit
	Prescriptive Duct Sealing Only	Up to \$300.00/dwelling unit
	Prescriptive air sealing – attic and crawl space	Up to \$200.00/dwelling unit
	Attic Insulation (R-0 to R-49)	Up to \$600.00/dwelling unit
	Attic Insulation (R-11 to R-49)	Up to \$600.00/dwelling unit
	Floor Insulation (R-0 to R-30)	Up to \$200.00/dwelling unit
	Wall Insulation (R-0 to R-13)	Up to \$400.00/dwelling unit
	Home Performance with Energy Star Rebate	Up to \$400.00
	Floor Insulation R-0 to R-22 – Manufactured Home	Up to \$600.00/dwelling unit
	Prescriptive Duct Sealing – Single Wide – Manufactured Home	Up to \$200.00/dwelling unit
	Prescriptive Duct Sealing – Double/Triple Wide – Manufactured Home	Up to \$400.00/dwelling unit
Windows	Upgrade single-pane with wood or metal frame windows to a 0.30 U-factor or better.	\$50.00 per window, up to \$750.00 per structure
	Upgrade single-pane with wood or metal frame windows to a 0.30 U-factor or better – Manufactured Home	\$50.00 per window, up to \$750.00 per structure

Specific requirements for Single Family Existing Natural Gas Incentives

- Some structural, HVAC and water heat measures require qualified contractor installation in order to be eligible for the indicated incentive.

5. 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.

Exhibit 3: Program Details

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, heat mapping, 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, self-service 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.

Exhibit 3: Program Details

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, propensity mapping, and research.
- Integrate and utilize Eco-consulting/Franklin at outreach tabling events across the service territory.

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 Trade Ally / 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 via targeted email marketing tactics.
- 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, heat mapping, 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.
- 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 select CAN related products.
- Develop updated suite of marketing collateral and training opportunities for contractors to drive awareness of PSE's energy efficiency rebates and offers.
- Create targeted and innovative advertising campaigns to promote CAN as a trusted resource of pre-screened, independent trade allies committed to helping customers make safe, dependable and efficient energy choices.

Exhibit 3: Program Details

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-and-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.

Eligible customers include the owner, developer, builder/owners or agent acting on behalf of responsible party of service receiving electricity through PSE's residential schedules 7 (including 17, 27, 37 and 47) and 7A, 8, 11 and 12, or commercial Schedules 8, 11, 12, 24, 25, 26, and 31; and/or natural gas service through PSE's residential Schedule 23 or commercial Schedule 31.

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.

All single family new construction buildings that are in a stage of construction which are not yet completed or ready for occupancy will be served by residential or commercial incentives. Incentives also apply to new additions to structures and complexes along with renovations that change the occupancy use to residential use. Relevant measures will apply only to the newly constructed and/or substantially renovated portion of the structure.

Structures include all Group R Occupancy and other occupancies as outlined in the International Energy Conservation Code of the State of Washington, also known as the Washington State Energy Code (WSEC). These include, but are not limited to: single-family, and duplexes.

c. 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.

d. 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.

Exhibit 3: Program Details

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, developed 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 home raters,⁵ in-unit program collateral, and PSE outreach efforts designed to inform the residents and prospective buyers of the program benefits.

e. 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.

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.

⁵ "Certified HERS Raters". HERS = Home Energy Rating System; a nationally recognized system for inspecting and calculating a home's energy performance.

The incentives are effective January 1, 2018. 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.

f. Incentives

i. Single Family New Construction Electric Service

Category	Measure	Maximum Incentive Amount Each
Single Family New Construction	20% above WSEC (4-Star BuiltGreen or equivalent) PSE Electric Space & Water Heat	\$1,500.00
	30% above WSEC (5-Star BuiltGreen or equivalent) PSE Electric Space & Water Heat	\$2,000.00
	20% above WSEC (4-Star BuiltGreen or equivalent) PSE Gas Space and Water Heat; PSE Electric	\$1,500.00
	30% above WSEC (5-Star BuiltGreen or equivalent) PSE Gas Space and Water Heat; PSE Electric	\$2,000.00

Exhibit 3: Program Details

ii. Single Family New Construction Natural Gas Service

Category	Measure	Maximum Incentive Amount Each
Single Family New Construction	BuiltGreen 4-Star (or equivalent) - PSE Gas Space & Water Heat; PSE Electric	\$1,500.00
	BuiltGreen 5-Star (or equivalent) - PSE Gas Space & Water Heat; PSE Electric	\$2,000.00
	BuiltGreen 4-Star (or equivalent) – PSE Gas Space & Water Heat; Other Utility Electric	\$750.00
	BuiltGreen 5-Star (or equivalent) – PSE Gas Space & Water Heat; Other Utility Electric	\$1,000.00

g. 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.

h. 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.

i. 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.

Exhibit 3: Program Details

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 tradeshow.
- 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.

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 "Energy Star w/ NEEM+ (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 Energy Star (NEEM 1.1) standard.

Exhibit 3: Program Details

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 owners, 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 manufacturers that construct energy-efficient manufactured homes and manufactured homebuyers. PSE will work to influence the market with manufacturers, sales people, and manufactured homebuyers 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.

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. 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.

d. 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.

e. Incentives

i. Manufactured Home Electric Service

Category	Measure	Maximum Incentive Amount Each
*Manufactured Home New Construction	Energy Star® (NEEM 1.1) – PSE Electric	\$1,000.00
	Energy Star® w/ NEEM+ (NEEM 2.1) – PSE Electric	\$1,500.00

Sales Performance Incentive Funds (SPIFs) may be offered through PSE’s Manufactured Home Point of Sale program for NEEM 1.1 and NEEM 2.0 rated manufactured homes and range from \$200 to \$300 per unit sold.

Exhibit 3: Program Details

These sales incentives are given to individual salespeople who sell qualified manufactured homes to customers in PSE's service area and assist the customer with the paperwork process. There may be instances where the company (retailer, reseller, etc.) receives the SPIF. SPIFs are offered to encourage salespeople to offer PSE's rebates at the point of sale

The Manufactured Home New Construction program does not offer natural gas incentives at this time.

f. 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.

g. Target Market

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

h. 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 the Northwest Energy Efficient Manufactured (NEEM) housing program and to promote the benefits of purchasing a certified home. Through manufacturer's and manufactured home salespersons the MHNC program will promote PSE's energy efficiency programs, and green 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 retailers.
- Promote energy efficient manufactured homes 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. The Multifamily New Construction Program intends to influence efficient design, building components and equipment in new buildings by working with customers, developers, tenants, owners, designers and builders of new multifamily 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.

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 Retrofit program measures in the following section.

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 multi-program 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.

Exhibit 3: Program 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 22, 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. PSE may, at its sole discretion, adjust rebates based on market variables.

PSE regularly reviews incentive amounts and savings values 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.

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. 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.

The Multifamily New Construction program provides incentives based on a whole-building approach. Qualifying projects may be eligible for varying degrees of incentives, based upon analyses of the range of measures installed and commissioned. 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.

i. Multifamily New Construction electric incentives

All multifamily buildings with four or more attached units.

Affordable multifamily projects with minimum 50 percent of all units available to 60 percent AMI and lower. Maximum incentive amount per square foot is 150 percent of standard market rate.

Category	Measure	Maximum Incentive Amount Each
Whole Building	Varies by project	Calculated per square feet

Exhibit 3: Program Details

ii. Multifamily New Construction natural gas incentives

All multifamily buildings with four or more attached units. Affordable multifamily projects with minimum 50 percent of all units available to 60 percent AMI and lower. Maximum incentive amount per square foot is 150 percent of standard market rate.

Category	Measure	Maximum Incentive Amount Each
Whole Building	Varies by project	Calculated per square feet

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.

Exhibit 3: Program Details

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 tradeshow.
- 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 8), and Residential New Construction (page 46).

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).

Exhibit 3: Program Details

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 Eligibility

An owner, developer, contractor, equipment supplier or agent acting on behalf of responsible party of service, or the customer of service of an existing multiple-family structure receiving electricity or natural gas through a PSE residential Schedule 7 (including 17, 27, 37 and 47) and 7A, or commercial Schedules 8, 11, 12, 24 and 25 and/or natural gas service under residential Schedule 23 or commercial Schedule 31 or 41.

Structures include, but are not limited to: apartments, town homes, condominium residences, and similar structures with five or more attached dwelling units. The program also serves multifamily Campuses⁶ which have a mixture of building types including buildings with less than five units. Single Family buildings⁷ within a campus may also be eligible to receive measures listed in the Single Family Existing program, Schedule 214 chapter, beginning on page 23.

The Multifamily Retrofit program also provides custom measures affecting commercial Schedules, where savings and incentives are calculated by a PSE Energy Management Engineer on a per-structure or per-project basis. Further details of incentive requirements can be found in this publication starting on page 65.

Multifamily measures not listed may be individually considered for incentives, based on overall cost effectiveness and energy efficiency.

⁶ Campuses are defined in Electric and Gas Conservation Schedule 217 in the Availability Section.

⁷ Single Family structures are discussed in the Eligibility section on page 23.

Selected PSE-approved contractors or vendors may be eligible for compensation to provide installation of specified measures—as a part of installation of a related measure. (For example, installing one or more Energy Star® LED bulbs during an HVAC installation), as a part of a pilot program, a limited-time offering, or other circumstances determined by PSE.

4. 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. Multifamily Retrofit Electric Service

PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program’s measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential. PSE may offer or withdraw these measures at its discretion. PSE may also, from time to time, implement Limited Time Offers (LTOs) to stimulate market activity.

Category	Measure	Maximum Incentive Amount Each
Air Sealing	Dense Pack Walls and Rim Joists	\$2.00 per sq. ft.
	Attic and/or Crawl Space	\$0.75 per sq. ft.
	Door Kits	\$100.00
	Recessed Can Covers	\$40.00
	Energy Star® Bathroom Fans (DC Motor)	\$200.00
	Bathroom Fan Timers	\$50.00
	Energy Star Doors	\$150.00

Exhibit 3: Program Details

Multifamily Retrofit electric measures, continued

Category	Measure	Maximum Incentive Amount Each
Appliances	Energy Star® qualified Clothes Washer	\$150.00
	Directly Installed Clothes Washer Replacement (Pre-existing model must be 1997 or earlier)	No charge to eligible customers
	Heat Pump Clothes Dryer (Vented or Ventless)	\$100.00
	Energy Star Clothes Dryer	50.00
	Refrigerator Decommissioning (working condition, greater than or equal to 10 cubic feet)	Free pick-up and recycling for eligible customers. Plus \$50.00 to eligible customers
Common Area	Common Area Lighting	Calculated incentive
	Parking Garage CO Sensor	Calculated Incentive
	Commercial Clothes Washers	\$200.00
HVAC	Electronic Line Voltage Thermostat	\$35.00
	Smart Thermostat	\$150.00
	Energy Star® Whole House Ventilation	\$50.00
	Energy or Heat Recovery Ventilation (EVR/HVR)	Calculated Incentive
	Ductless Heat Pump	\$800.00
	Variable Speed Drive	Calculated Incentive
	Line Voltage Web-Enabled Thermostat Pilot	No charge to eligible customers
Insulation	Attic Insulation R-0 to R-38	\$0.75 per sq. ft.
	Attic Insulation R-11 to R-38	\$0.75 per sq. ft.
	Attic Insulation R-19 to R-38	\$0.75 per sq. ft.
	Floor insulation R-0 to R-30	\$0.75 per sq. ft.
	Floor Insulation R-11 to R-30	\$0.75 per sq. ft.
	Wall insulation R-0 to R-11	\$0.75 per sq. ft.
Lighting	Tenant-controlled Energy Star® or equivalent LED Bulbs (directly installed)	No charge to eligible customers
O&M and Behavioral	Comprehensive Building Tune-up	Calculated
	Strategic Energy Management Pilot	No charge to eligible customers
Pool Heat	Solar or Heat Pump Pool Heater upgrade	Calculated incentive

Multifamily Retrofit electric measures, continued

Category	Measure	Maximum Incentive Amount Each
Water Heat	Directly Installed 1.5 Gallon Per Minute (GPM) or less shower heads	No charge to eligible customers
	Directly Installed 1.5 Gallon Per Minute Thermostatic Flow Restrictor Showerhead	No charge to eligible customers
	Directly Installed Thermostatic Flow Restrictor Showerhead Adaptor	No charge to eligible customers
	Directly Installed 1.5 Gallon Per Minute or less Faucet Aerators	No charge to eligible customers
	Directly Installed Auto-diverting Tubspout Pilot	No charge to eligible customers
	Heat Pump Water Heater NEEA-NW Climate Tier 3 Certified Product	\$800.00
	Directly Installed Water Heater Pipe Wrap; R3 value minimum 3 feet.	No charge to eligible customers
Windows	Single-Pane Windows to U value 0.30 or less	\$9.00 per sq. ft.
	Single-Pane Windows to U value 0.22 or less	\$12.00 per sq. ft.
	Double-Pane Windows to U value 0.30 or less	\$7.00 per sq. ft.
	Double-Pane Windows to U value 0.22 or less	\$9.00 per sq. ft.

Specific requirements for electric incentives

- A signed Multifamily Incentive Application must be authorized by PSE prior to installation of upgrades for projects affecting more than one dwelling unit (unless otherwise approved by PSE),
- Customer must meet all requirements outlined in the most current PSE Multifamily Retrofit Program Guidelines to participate and receive incentives,
- A Multifamily Payment Request must be authorized by PSE in order to execute incentive payment,
- All calculated incentives will be evaluated using currently accepted PSE commercial engineering calculations,

Exhibit 3: Program Details

- All installed measures and incentives require installation by a qualified contractor.
- Air sealing measures in specific must be installed by a PSE certified Multifamily air sealing contractor.

b. Multifamily Retrofit Natural Gas Service

PSE regularly offers some measures on a pilot basis. In these cases, the measure is color-coded separately from standard offerings in the applicable program's measure tables. PSE pursues pilot measures in order to test market acceptance and confirm savings potential. PSE may offer or withdraw this measures at its discretion. PSE may also, from time to time, implement Limited Time Offers (LTOs) to stimulate market activity

Category	Measure	Maximum Incentive Amount Each
Appliances	Commercial Clothes Washer	\$150.00
Building Envelope	Attic Insulation R-0 to R-38	\$0.75 per sq. ft.
	Attic Insulation R-11 to R-38	\$0.75 per sq. ft.
	Wall Insulation R-0 to R-11	\$0.75 per sq. ft.
	Floor Insulation R-0 to R-30	\$0.75 per sq. ft.
	Single-pane Windows to U-value 0.30 or lower	\$7.00 per sq. ft.
	Single-pane Windows to U-value 0.22 or lower	\$9.00 per sq. ft.
	Air Sealing	Calculated

Multifamily Retrofit natural gas measures, continued

Category	Measure	Maximum Incentive Amount Each
HVAC	Smart Thermostat	\$150.00
	Replace Existing Space Heat Boiler	Calculated incentive
	Replace Existing Domestic Water Boiler	Calculated incentive
	Integrated Space/Water Heating Systems with Energy Star® Tankless or Energy Star® Boiler (In-Unit)	\$800.00
	High Efficiency Natural Gas Fireplace (In-Unit)	\$200.00
	Energy Star® qualified Boilers (In-Unit)	\$350.00
	Energy Star® qualified Gas Furnace, 95% AFUE (In-Unit)	\$250.00
	Variable Speed Drive	Calculated incentive
O&M and Behavioral	Comprehensive Building Tune-up	Calculated incentive
	Strategic Energy Management Pilot	No charge to eligible customers
Pool Heaters	Solar Pool Heater	Calculated incentive
	Pool Boiler	Calculated incentive
Water Heat	Directly Installed 1.5 Gallon Per Minute or less Shower Heads	No charge to eligible customers.
	Directly Installed 1.5 Gallon Per Minute or less Shower Head with Integrated Thermostatic Restrictor Valve	No charge to eligible customers.
	Directly Installed Thermostatic Restrictor Shower Head Adaptor	No charge to eligible customers.
	Directly Installed 1.5 Gallon Per Minute or less Faucet Aerators	No charge to eligible customers.
	.90 EF Tankless Water Heater	\$250.00
	.67 EF Tank Water Heater	\$50.00
	Directly Installed Auto-diverting Tubspout Pilot	No charge to eligible customers

Specific requirements for natural gas incentives

- A signed Multifamily Incentive Application must be authorized by PSE prior to installation of upgrades for projects affecting more than one dwelling unit (unless otherwise approved by PSE),
- Customer must meet all requirements outlined in the most current PSE Multifamily Retrofit Program Guidelines to participate and receive incentives,
- A Multifamily Payment Request must be authorized by PSE in order to execute incentive payment,
- All calculated incentives will be evaluated using currently accepted PSE commercial engineering calculations,
- All installed measures and incentives require installation by a qualified contractor.

5. Target Market

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

6. 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 the following initiatives.

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.

Exhibit 3: Program Details

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.

c. 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.

d. 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.

e. 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.

f. 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.

Exhibit 3: Program Details

- 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. Single Family Rental

As PSE shared with the CRAG in its August 22, 2018 meeting, PSE analyzed the scope of development and implementation work necessary to conduct this pilot. Program staff recognized that the costs would be double those first anticipated, thus making the pilot cost-ineffective. For 2019, the pilot will be on hiatus while program staff examines alternatives.

2. Low Income Weatherization Mobile Home Replacement

Also noted in the CRAG August 22, 2018 meeting, PSE outlined its plans to implement a limited mobile home replacement pilot. The pilot will validate funding sourcing, agency coordination, and energy savings. PSE plans include demonstration projects of five replacements completed in the spring of 2019.

3. Pilot-Analogous Initiatives

Several new and exciting programs and measures will carry over from 2018. Although excluded from the “Pilots with Uncertain Savings” classification, these should be, nevertheless, considered analogous to pilots.

The Direct to Consumer Channel will test a new phase of the web-enabled thermostat program, collaborating with a major manufacturer to test the savings potential of a thermostat optimization solution that will facilitate automated changes to eligible customers’ schedules. Multifamily Retrofit will continue its SEM pilot.



IV. BUSINESS ENERGY MANAGEMENT

Exhibit 3: Program Details

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' Pay for Performance pilot program targets the engagement of several customers in 2019 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 Midstream

Program staff successfully implemented the Commercial Midstream pilot in 2018. In 2019, the initiative becomes an ongoing program, so will no longer be considered a pilot.

3. Pilot-Analogous Initiatives

Several new and exciting programs and measures will carry over from 2018. Although excluded from the "Pilots with Uncertain Savings" classification, these should be, nevertheless, considered analogous to pilots.

In the BEM, the Commercial Kitchens program developed a standardize Demand Control Kitchen Ventilation (DCKV) incentive, which will be launched in 2019. Another program in BEM, the Industrial Systems Optimization Program (ISOP), has also converted its I-SEM (Industrial Strategic Energy Management) pilot into an ongoing program.

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.

Exhibit 3: Program Details

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.

g. 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 energy-use 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.

Exhibit 3: Program Details

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. Eligibility

All Commercial and/or Industrial customers receiving electricity or bundled natural gas service from PSE are eligible. Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for measures offered under this Retrofit program and its related contracted programs. Projects must be approved for funding prior to installation/implementation.

Commercial and Industrial Retrofit incentives are calculated on an individual basis. They take the form of a grant, which is provided upon completion and verification of the project.

b. Measures and Incentives

The Retrofit program is a custom incentive program. It is not limited to any measure type or market segment. It is intended to provide the customer flexibility in developing projects that will result in energy savings.

Available Grants include, but are not limited to:

Measures	Incentive	Eligibility
Grants for Business Lighting	Based on cost and savings analysis, pay the lesser of 70% of the project cost or \$0.15 per annual kWh savings, subject to PSE Cost-Effective Standards with an additional “bonus” of \$50.00 paid per each interior LED upgraded LLLC fixture installed. TLED incentives match Program 262 deemed incentive amounts.	Lighting measures
Grants for Non-Lighting Measures	Based on cost and savings analysis, pay the lesser of 70% of the project cost or \$0.30 per annual kWh savings (\$5.00 per annual therm savings), subject to PSE Cost-Effective Standards.	Non-Lighting measures
Grants for Advanced Rooftop Controls (ARC)	Based on \$225/ton for PSE electric equipment and an additional \$50/ton for PSE gas equipment.	Existing, single-zone units that are less than 15 years old, have a cooling capacity greater than 5 tons, and a supply fan greater than 1 HP. Projects that don't meet the eligibility requirements may pursue a non-lighting grant.
Post-Occupancy Commissioning	See table and information that follows	Depends on services provided by PSE. See table and information that follows
Comprehensive Building Tune-Up (CBTU) Incentive	See table and information that follows	Depends on services provided by PSE. See table and information that follows
Major HVAC Controls Upgrade	See table and information that follows	Depends on services provided by PSE. See table and information that follows

Retail wheeling customers may utilize their Schedule 258 Large Power User Self-Directed Program incentive allocation.

Exhibit 3: Program Details

Measure: Post-Occupancy Commissioning

For buildings that have been occupied between 6 months and 18 months, incentives are designed to cover up to 75 percent of the post-occupancy commissioning costs, as well as to provide the owner a full list of cost-effective energy savings opportunities.

Post-Occupancy Commissioning Program Incentives

Description	Incentive Details	Maximum Incentive Building's Utility Services		
		PSE all services	PSE Electricity only (other gas)	PSE gas only
Base Incentive for Commissioning (CX)	Incentive Cap	75% of Commissioning (CX) Provider Costs		
	CX Process: (Investigation, Verification, Systems Manual, Training)	\$0.35/sf	\$0.25/sf	\$0.15/sf

Eligibility for incentives, all building fuel types, requires independent commissioning.

Measure: Comprehensive Building Tune-Up (CBTU) Program

For existing building commissioning, (buildings older than 18 months) incentives are designed to cover up to 100 percent of the commissioning costs, as well as to provide the owner a full list of cost-effective energy savings opportunities. The owner is required to commit up to a pre-set dollar amount to implement operational improvements with a less than or equal to two year payback as well as provide up to 50 hours of Operations and Maintenance (O&M) staff time for participation in the process, including training.

Incentives are paid in three phases. An assessment paid once the assessment is completed, base Incentive paid after a Commissioning is completed, and a performance bonus Incentive is paid after first-year savings requirements are met and the owner documents that savings improvements are still in place. If the assessment indicates the building is an inappropriate candidate for Commissioning, only the assessment incentive will be paid.

If there is no metering at the building level, the customer may also be eligible for an incentive for sub-metering to assist the owner in monitoring building energy usage.

CBTU Program Incentives

Description	Incentive Details	Maximum Incentive Building's Utility Services		
		PSE all services	PSE Electricity only (other gas)	PSE gas only
Base Incentive for Commissioning (CX)	Incentive Cap	75% of Commissioning (CX) Provider Costs		
	Assessment (Minimum Grant)	\$5,000	\$4,000	\$2,000
	Remaining CX Process: (Investigation, Verification, Systems Manual, Training)	\$0.35/sf	\$0.25/sf	\$0.15/sf
Owner Commitment	Cost of Improvements (Maximum)	\$0.15/sf	\$0.10/sf	\$0.10/sf
	Required Improvements	Improvements with \leq 2 year payback.		
	Implementation Time Frame	Within 6 months of Investigation		
	Senior O&M Staff Time	50 hours to participate in process and training		
One Year Performance Bonus Incentive	Incentive Cap	100% of Total Cost (CX Provider + Implementation)		
	Incentive for Electric Savings	\$0.05/kWh	\$0.05/kWh	N/A
	Incentive for Electric Savings	\$0.05/kWh	\$0.05/kWh	N/A
	Incentive for Gas Savings	\$0.80/therm	N/A	\$0.80/therm
	Required Building Savings	8%	8%	11%
	Required documentation	Evidence that improvements are still in place.		
Sub-metering Incentive	Eligible for incentive if no metering is present at the building level	Pay up to \$3,000 per building to install sub- metering.		

Measure: Major HVAC Controls Upgrade

Major HVAC controls upgrade incentives can cover up to 50% of the total applicable project cost depending on verified energy saving from the project. Major HVAC controls upgrades involve adding and/or modifying 3 or more significant energy saving control sequences as well as other major upgrades such as new controllers and a new web-based graphical user interface.

Incentives are provided in 2 phases: a base incentive paid at the end of the installation and a performance incentive paid after almost a full year of actual operation.

Exhibit 3: Program Details

The performance incentive is based on verified savings at the whole building level. The incentive level varies depending on the services provided by PSE. See the table below.

The project must meet PSE prescribed requirements for the controls sequences and features and the system must undergo testing to verify proper installation and operation. The project must also include customer training and a facility guide designed to help the operator maintain the facility energy efficiency performance over time.

If there is no energy metering at the building level, the customer may also be eligible for an incentive for sub-metering to assist in determining the actual building performance. Whole building sub-metering incentive follows the same guidelines as the sub-metering incentive in the CBTU program.

HVAC Controls Upgrade Incentive		
Incentive Description	PSE Electric (or combined Electric & Natural Gas Service)	PSE Natural Gas Service Only
Maximum Total Incentive = Base + Performance	50 percent of total project cost	25 percent of total project cost
Base Incentive (Based on 5 percent whole building savings*)	\$0.30 per kilowatt-hour (kWh) saved (+ \$4.70 per therm saved)	\$4.70 per therm saved
Maximum Base Incentive	35 percent of cost	15 percent of cost
Performance Incentive (Based on first year whole building savings)	Based on actual percentage of whole building savings greater than six percent	\$4.70 per therm saved

**Whole building energy use may exclude large non-HVAC uncontrollable/process loads like data centers. Whole Building Metering: If there is no energy metering at the building level, the customer may also be eligible for an incentive of up to \$3,000 for sub-metering to assist in determining the actual building performance.*

Measure: HVAC Variable Refrigerant Flow System (VRF) Incentive

The Variable Refrigerant Flow System (VRF) measure incentive is offered to encourage installations of this energy-efficient technology. Qualifying commercial offices and schools may receive a prescriptive per-unit incentive based on affected square footage of conditioned space the units serve.

Savings and incentive values are shown in the following table.

Variable Refrigerant Flow (VRF) System Incentive and Savings

Electric Incentive \$/square foot of Conditioned Space	Electric Savings kWh/sq. ft.	Incremental Cost \$/sq. ft.
\$1.00/sq. ft.	3.95 kWh/sq. ft.	\$3.44/sq. ft.

4. Industrial System Optimization Program (ISOP)

a. Eligibility

Industrial customers receiving electric service or electric and natural gas from PSE are eligible for this program.

b. Measures

The objective of the Industrial System Optimization Program (ISOP) is to identify, evaluate, and implement projects in industrial customer facilities to improve operational energy efficiency. The focus is on energy intensive systems such as refrigeration, compressed air, pumping, fans, and blowers. This is a Performance Basis program that determines savings based on actual verified electric and natural gas savings from implemented measures.

Operational efficiency improvement measures reduce the energy consumption of a system, process, and entire plant without significant capital investment. The measure focuses on the operation changes instead of equipment or system retrofit.

Examples of the operational efficiency improvement measures include control sequence modification and set-point adjustment for refrigeration or heating systems, compressed air leak detection and repair, compressed air shut-off valves at workstations, modulation of fan or blower speeds based on demand, and controls, modification, or installation of timers to shut off pumps when not required for the operation.

Exhibit 3: Program Details

c. Incentives

The customer incentive is to cover a portion of the optional cost the customer incurs to purchase and install a PTS (performance tracking system) and the direct operational efficiency improvement incentive based on verified energy savings.

Measures	Incentive	Eligibility
Operational Efficiency Improvement and Performance Tracking Systems (PTS)	<p>The Lesser of:</p> <ol style="list-style-type: none"> 1) \$0.05 times verified kWh saved and \$0.8 times verified Therms saved; or 2) 100% of Action Item Cost + PTS Cost (optional) if implemented within 4 months from the date PSE approves the optimization report. or 3) 50% of Action Item Cost + PTS cost (optional) if implemented after 4 months from the date PSE approves the optimization report. <p>Based on cost and savings analysis, and subject to PSE Cost-Effective standards.</p>	Based on verified savings and End User purchases and installs, PSE approves of optional PTS.
Industrial Strategic Energy Management (I-SEM)	<ol style="list-style-type: none"> 1) \$0.01 times verified kWh saved with a not to exceed \$4000 amount per site 2) Two (2) \$500 potential milestones incentives for each participant with a not to exceed \$1000 per site 	Based on meeting milestones or verified savings.

5. Target Market

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

6. 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 more-effectively 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 team.
- 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 team will develop and implement outreach strategies to promote program offerings as follows:

Exhibit 3: Program Details

- 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.

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.

Exhibit 3: Program Details

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.

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.

Exhibit 3: Program Details

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, and subject to availability, the Company may provide secure web site access to facility energy-use data for building occupant, free of charge. Typically, energy consumption data will be available 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 will have the ability to use the monitored information to improve energy efficiency at the facility, capitalize on additional energy savings opportunities, and identify further efficiency measures, equipment upgrades, and O&M activities.

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. Eligibility

Any Customer, owner or tenant with appropriate owner consent, of a new construction commercial, industrial, multi-family, or mixed-end-use facility or outdoor lighting which will receive natural gas service from the Company, and/or electric service under Special Contracts, or Schedules 7A, 24, 25, 26, 31, 35, 40, 43, 46, 49, 50, 51, 52, 53, 54, 55, 57, 58, 448, 449, 458, 459 (or their equivalent) of Electric Tariff G of the Company.

Customer must currently be or plan to be a PSE business electric and/or natural gas customer, and the new business site must be within PSE's electric and/or natural gas service areas.

Customer must be pre-approved by PSE prior to the installation of all energy efficiency improvement measures.

b. Incentives

There are three incentive paths for New Construction projects. The paths are intended to provide customers flexibility in meeting their project needs. A commissioning incentive may be used in combination with any of these paths.

Exhibit 3: Program Details

Commercial/Industrial New Construction Incentive Table – *Figures based on maximum funding amount.*

Path	Incentive	Eligibility
Energy Model Whole Building	\$0.30 per annual kWh savings and 5.00 per annual therm savings compared to code-baseline or standard practice system. Incremental cost to be the same as the incentive amount.	Facilities must be more than 50,000 sq. ft. and involve multiple measures, as determined by PSE. Facilities less than 50,000 sq. ft may qualify with PSE approval. Facility must use 10% less energy than applicable energy code.
Component Approach	<u>Lighting</u> : \$0.15 per annual kWh savings compared to code-baseline or standard practice system, subject to PSE Cost-Effective Standards. Incremental cost to be the same as \$0.15 per annual kWh for projects with a code baseline that uses lighting power density (LPD). In addition, a \$50 per LLLC fixture incentive will be available for qualifying fixtures.	For lighting, proposed system must have 20% less lighting power density than applicable energy code. LLLC fixtures must meet qualifying criteria listed in the Business Lighting Program.
	<u>Non-lighting</u> : lesser of 100% of the incremental cost or \$0.30 per annual kWh savings, subject to PSE Cost-Effective Standards.	
	<u>Natural gas</u> : lesser of 100% of the incremental cost or \$5.00 per annual therm savings, subject to PSE Cost-Effective Standards.	
Rebates Measure	See eligible measures list under Commercial & Industrial Incentives Schedule 262 section.	

Post Occupancy Commissioning Incentive

Incentives, based on square foot of conditioned space, are available for projects utilizing an independent commissioning agent of post-occupancy commissioning:

New Construction Post-Occupancy Commissioning Incentive Table – Figures based on maximum funding amount.

Description	Incentive Details	Maximum Incentive Building's Utility Services		
		PSE all services	PSE Electricity only (other gas)	PSE gas only
Base Incentive for Commissioning (CX)	Incentive Cap	100% of Commissioning (CX) Provider Costs		
	Remaining CX Process: (Investigation, Verification, Systems Manual, Training)	\$0.35/sf	\$0.25/sf	\$0.15/sf
Owner Commitment	Senior O&M Staff Time	50 hours to participate in process and training		

Eligibility for incentives, all building fuel types, requires independent commissioning.

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.

Exhibit 3: Program Details

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.

Overview

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 tradeshow.
- Host or co-host events for customers and contractors with other programs.

Exhibit 3: Program Details

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.

Exhibit 3: Program Details

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 pre-established 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.

c. 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.

d. 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.

e. 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.

f. 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.

g. 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.

Exhibit 3: Program Details

- *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.

a. *Eligibility*

Any Customer, owner, or tenant with appropriate owner consent, of a commercial, or industrial facility with multiple accounts or facilities with qualifying usage receiving Electric Service under a Special Contract, or Schedules 7A, 24, 25,26, 29, 31, 35, 40, 43, 46, 49 (or their equivalent) of Electric Tariff G from the Company is eligible. Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for Commercial Strategic Energy Management (SCEM) Incentives.

Customer eligibility is determined by PSE energy base load and potential savings. A typical customer baseline for maximum program funding is 20,000,000 kWh for electric only or 2,700,000 therms for 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 Energy Management 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.

b. General Description of Program Offerings

Commercial Strategic Energy Management (CSEM)

The table on the following page summarizes the Grant and Services package for the CSEM program. A description of each menu item follows providing details of the service and required deliverables. The grant measures are allocated to the year in which PSE expects them to be paid; the actual timing will vary based on the customer's completion of deliverables.

Exhibit 3: Program Details

CSEM Direct Customer Incentive Table – Figures based on maximum funding amount.

Program Element		Formula / Notes	Measure Cost	Incentive
Year One	Training Allowance/Software Stipend	Stipend for participation in BOC level 1 & 2 training or other accredited training if desired, subject to approval by PSE. Measure cost is PSE discounted tuition. Support for purchase of resource accounting software.	\$2,000	\$2,000
	Start-Up Incentives	Start-up incentive provided to customers that submit required first year deliverables within first year of grant. Measure cost is 100% of incentive amount.	\$10,000	\$10,000
	Performance Incentive	Performance incentive of \$0.02/kWh and \$0.15/therm of savings up to PSE defined performance target (typically 3% of baseline). If a customer exceeds the target, the performance incentive increases to \$0.035/kWh and \$0.25/therm for each additional unit of energy savings over the target up to 70% of the measure cost. In this table, an example performance incentive of \$12,000 is shown for a customer that saved 600,000 kWh, or 3% of 20,000,000 kWh baseline. The measure cost is equal to 100% of deemed customer annual program cost, minus the start-up and bonus incentive amount.	\$80,000	\$56,000 maximum
	Target Incentive	Target incentive if customer meets or exceeds PSE defined performance target (typically 3% of baseline). Measure cost is 100% of incentive amount.	\$10,000	\$10,000

CSEM direct incentives, continued

Program Element		Formula / Notes	Measure Cost	Incentive
Year Two and Three	Training Allowance/Software Stipend	Stipend for participation in BOC level 1 & 2 training or other accredited training if desired, subject to approval by PSE. Measure cost is PSE discounted tuition. Support for purchase of resource accounting software.	\$2,000	\$2,000
	Performance Incentive	Performance incentive of \$0.02/kWh and \$0.15/therm of savings, up to PSE defined performance target (typically 5% of baseline). If a customer exceeds the target, the performance incentive increases to \$0.035/kWh and \$0.25/therm for each additional unit of energy savings over the target up to 70% of the measure cost. In this table, an example performance incentive of \$20,000 is shown for a customer that saved 1,000,000 kWh, or 5% of their 20,000,000 kWh baseline. The measure cost is equal to 100% of deemed customer annual program cost, minus the bonus incentive amount.	\$80,000	\$56,000 maximum
	Target Incentive	Target incentive if customer meets or exceeds PSE defined performance target (typically 5% of baseline). Measure cost is 100% of incentive amount.	\$20,000	\$20,000
Total Incentives for Initial Three-Year Agreement			\$306,000	\$234,000 maximum

c. CSEM Value-Added Service Descriptions

There are a number of support activities that PSE provides to each CSEM customer as a part of their CSEM agreement.

Exhibit 3: Program Details

While these program elements do not relate to a cash incentive, they are specific project-oriented tasks that relate to a value of service that can be quantified for each customer based on their organization profile. A description of each major service is provided below.

i. Resource Management Software

PSE will provide the customer with access to resource management software. The software will include facility information and PSE accounts, and will be populated with historical PSE billing data.

Once the customer is trained on the software, the customer is expected to complete the setup with organization structure, building information, utility companies, and account numbers for electricity, gas, water, wastewater, and solid waste accounts.

ii. Resource Management Software Set Up

PSE staff will work with the customer to develop a comprehensive list of the customer's PSE gas and electric accounts and align them to the correct facility. Once this list is developed, PSE will complete the initial setup of resource management software with the customer's facilities and PSE accounts and meters. This web-based software tool will provide access to historical PSE data for each customer's electric and/or gas accounts as well as interval data for qualifying meters.

iii. Annual Savings Analysis

PSE will work with the customer to calculate O&M energy savings after each 12-month period of their CSEM contract. Adjustments will be made for major capital improvements, change in use, weather, and other factors that may have had a significant impact to facility energy use.

iv. NEEA Conduit Website Access and SEM Hub

PSE will provide access to a private group, "Puget Sound Energy SEM Group," on Northwest Energy Efficiency Alliance (NEEA)'s Conduit website as well as the SEM Hub. This group is an online technical support and materials center that has been developed to help Energy Managers with their program implementation.

The group hosts PSE program materials that have been developed for implementation and reference and allows for Energy Managers to communicate with each other in a chat room style setting.

v. *Three-for-Free Technical Audits*

For each customer qualifying for full funding, PSE will provide an initial three (3) facility audits to jump-start customers on the process of completing Facility Action Plans. The site visits will act as both training and technical assistance such that through this process, and along with the CSEM training series, each Energy Manager will gain the knowledge necessary to perform their own detailed facility audits. During these first walkthroughs, the Energy Manager will learn how to gather the information necessary to complete the second deliverable of the Start-up Grant, their Facility Action Plans. The number of site visits will be prorated based on the baseline usage.

vi. *CSEM Training Series*

To support customers' resource conservation efforts, PSE has designed a series of courses to help customers learn more about building energy, resource consuming systems, and the tools that will help customers be effective in their role as resource conservation managers. There are core classes offered, as well as a number of advanced and specialized courses. Most training classes are scheduled to be held at the Bellevue PSE campus, but may be customized for and offered at customer's facilities. Webinars may also be available.

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.

Exhibit 3: Program Details

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.

d. 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.

e. 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.

f. 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.

g. Community Outreach

Energy Efficient Communities team 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, cost-effectiveness 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, 2019 to December 31, 2022. Customers are given until March 31, 2021 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 will be issued on May 15, 2021, with the submittal deadline being July 14, 2021.

Received proposals are 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. Eligibility

Customers receiving electrical service from the Company under Schedules 40, 46, 49, 448, 449, 458 or 459 (or their equivalent) of Electric Tariff G with cost-effective electric energy efficiency projects are eligible to respond to the Company's Requests for Proposals (RFPs). Schedule 258 and the RFPs outline all project funding criteria.

Incentives are calculated on an individual basis. They take the form of a grant, which is provided upon completion and verification of the project.

4. 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.

Exhibit 3: Program Details

The program is a custom incentive program. It is not limited to any measure type or markets. It is intended to provide the customer flexibility in developing projects that will result in energy savings.

The incentive amount is up to \$0.50 per annual kWh savings subject to PSE cost effectiveness standards.

Large Power User/Self-Directed measure categories include, but are not limited to:

Category	Includes
HVAC and Refrigeration	HVAC – unitary
	HVAC – central
	Heat Recovery Systems
	Chillers
	Economizers
	VAV Boxes
Commissioning and Optimization	Commissioning/Optimization of energy systems
Process Efficiency Improvements	Refrigeration Systems
	Motor and Drive Systems
	Fan, Compressor and Pump Systems or Stations
	High Efficiency Motors
	Other Process Modifications
Building Thermal Improvements	Roof and Ceiling Insulation
	Exterior Roof Insulation
	Wall Insulation
	Insulated Windows
	Duct Insulation
Existing Building Insulation Controls	Energy Management Systems
	Lighting Control Systems
	Process and Other Efficiency
	Control Systems
Lighting Improvements	Fluorescent Luminaires
	LED Luminaires

Large Power User/Self-Directed measure categories, continued

Category	Includes
Water Heating Improvements	Water Heaters
	Piping Insulation
	Low Flow Devices
Resource Conservation Management (RCM)	

5. 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.

6. 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,
- Commercial Maintenance measures including web enabled thermostats and Advanced rooftop controls.
- 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 Managers of Residential Energy Management and 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.

Incentives are paid one of three ways: directly to the customer (although it may be assigned by the customer to the contractor); deducted from the sales price at the point of sale, (in which case the participating vendor may be eligible for an additional sales incentive); or to wholesale distributors to promote sales, stocking of efficient equipment and cost.

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 below.

a. Eligibility

All Commercial and/or Industrial customers receiving electricity or bundled natural gas service from PSE are eligible. Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for measures offered under this program.

Multifamily-related businesses or those with dwelling units will be referred to the Multifamily Program.

In the rare instances that customers operate a business on residential rate schedules (for instance, out of the home or garage) PSE will offer the appropriate measures providing that the customer is able to show proof of business license, pending individual approval by PSE staff.

Exhibit 3: Program Details

b. Commercial Clothes Washers

Customer will receive a rebate based on the energy source for the water heating and/or the energy source fueling the accompanying dryer heat. When the energy for water heating and dryer heating is different, PSE will pay the eligible customer the rebate amount that corresponds to the component of the equipment using energy provided by PSE. Qualifying clothes washers must be installed in the following locations and must be commercial-grade equipment: Laundromats, Multi-family, or Lodging facilities.

Measure	Maximum Incentive Amount	Eligibility
High-Efficiency Clothes Washers	Up to \$200.00 per unit	Energy Star® qualified

c. Dishwashers

Customers will receive a rebate based on dishwasher type and the energy source for water heating and/or a booster heater as outlined by the table below when an Energy Star® Qualified model is purchased. Some leased equipment may also qualify if the lease results in the customer owning the equipment at the end of the lease period. In applicable instances, PSE will coordinate with overlapping energy providers and the water utility for consideration of potential incentives when those utilities have corresponding rebates.

Sales Performance Incentive Funds (SPIFs) are offered through PSE's Commercial Kitchen Point of Sale program for each type of equipment, and range from \$30 to \$50 per unit sold. These sales incentives are paid to individual salespeople who sell point-of-sale qualified commercial kitchen equipment to and process the paperwork for commercial customers installing in a PSE service area. There may be instances where the company (retailer, reseller, etc.) receives the SPIF.

Commercial Dishwasher Rebates

E=electric, G=gas

Type	Water Heater Type	Booster Type	Electric Rebate	Gas Rebate	Possible Total Rebate
Under Counter, Low Temp	E	-	\$150		\$150
Under Counter, Low Temp	G	-		\$150	\$150
Under Counter, High Temp	E	E	\$150		\$150
Under Counter, High Temp	G	E	\$150		\$150
Under Counter, High Temp	E	G	\$150		\$150
Under Counter, High Temp	G	G	\$100	\$50	\$150
Door Type, Low Temp	E	-	\$750		\$750
Door Type, Low Temp	G	-		\$750	\$750
Door Type, High Temp	E	E	\$750		\$750
Door Type, High Temp	G	E	\$500	\$250	\$750
Door Type, High Temp	E	G	\$500	\$250	\$750
Door Type, High Temp	G	G		\$750	\$750
Single Tank Conveyor, Low Temp	E	-	\$1,000		\$1,000
Single Tank Conveyor, Low Temp	G	-		\$1,000	\$1,000
Single Tank Conveyor, High Temp	E	E	\$1,000		\$1,000
Single Tank Conveyor, High Temp	G	E	\$750	\$250	\$1,000

Exhibit 3: Program Details

Commercial dishwasher rebates, continued

Type	Water Heater Type	Booster Type	Electric Rebate	Gas Rebate	Possible Total Rebate
Single Tank Conveyor, High Temp	E	G	\$750	\$250	\$1,000
Single Tank Conveyor, High Temp	G	G		\$1,000	\$1,000
Multi Tank Conveyor, Low Temp	E	-	\$1,500	-	\$1,500
Multi Tank Conveyor, Low Temp	G	-	-	\$1,500	\$1,500
Multi Tank Conveyor, High Temp	E	E	\$1,500	-	\$1,500
Multi Tank Conveyor, High Temp	G	E	\$1,000	\$500	\$1,500
Multi Tank Conveyor, High Temp	E	G	\$1,000	\$500	\$1,500
Multi Tank Conveyor, High Temp	G	G	-	\$1,500	\$1,500

E=electric, G=gas

d. Commercial Cooking Equipment

Measure		Maximum Incentive Amount	Eligibility
Hot Food Holding Cabinets	Electric Hot Food Holding Cabinet - Small Size (0 < V < 13 ft3)	\$150.00/unit	Energy Star® V2.0 Qualified
	Electric Hot Food Holding Cabinet – Medium Size (13 ≤ V < 28)	\$500.00/unit	
	Electric Hot Food Holding Cabinet – Large Size (V ≥ 28)	\$750.00/unit	
Steamers	10 pans or larger (electric & gas)	\$950.00/unit	Energy Star® V1.2 Qualified
	6 pans (electric & gas)	\$550.00/unit	
	5 pans (electric & gas)	\$450.00/unit	
	4 pans (electric & gas)	\$350.00/unit	
	3 pans (electric & gas)	\$250.00/unit	

Commercial cooking equipment, continued

Measure		Maximum Incentive Amount	Eligibility	
Deep Fat Fryers	Standard Vat – electric	\$1,000.00/ unit	Energy Star® V2.0 Qualified	
	Large Vat - electric	\$400.00/unit		
	Standard Vat – gas	\$1000.00/unit		
	Large Vat – gas	\$500/unit		
Ovens	Convection	Commercial Natural Gas or Electric Convection Ovens	A list, based on the Food Service Technology Center (FSTC) will be made available to commercial kitchen equipment dealers and will be posted on the Company's website.	
		\$450.00/Half-size unit (gas)		
		\$500.00/Half-size unit (electric)		
	Combination, Gas	Natural Gas Combination Oven <15 pans		\$1,000.00/unit
		Natural Gas Combination Oven 15-28 pans		\$1,500.00/unit
		Natural Gas Combination Oven >28 pans		\$7,000.00/unit
	Combination, Electric	Electric Combination Oven <15 pans		\$2,500.00/unit
		Electric Combination Oven 15-28 pans		\$3,000.00/unit
		Electric Combination Oven >28 pans		\$7,000.00/unit
	Deck/Rack, Electric or Gas	Electric Deck Oven, any size		\$1,500.00/unit
Natural Gas Single-Rack Oven		\$1,500.00/unit		
Natural Gas-Double-Rack Oven		\$1,000.00/unit		

Exhibit 3: Program Details

Commercial cooking equipment, continued

Measure		Maximum Incentive Amount	Eligibility
Griddles, Electric	Electric Griddle – 2 linear feet of cook space	\$200.00/unit	Energy Star® V1.2 Qualified
	Electric Griddle – 3 linear feet of cook space	\$300.00/unit	
	Electric Griddle – 4 linear feet of cook space	\$400.00/unit	
	Electric Griddle – 5 linear feet of cook space	\$500.00/unit	
	Electric Griddle – 6 linear feet of cook space	\$600.00/unit	
Griddles, Gas	Gas Griddle – 2 linear feet of cook space	\$900.00/unit	Energy Star® V1.2 Qualified
	Gas Griddle – 3 linear feet of cook space	\$1,300.00/unit	
	Gas Griddle – 4 linear feet of cook space	\$1,400.00/unit	
	Gas Griddle – 5 linear feet of cook space	\$1,500.00/unit	
	Gas Griddle – 6 linear feet of cook space	\$1,600.00/unit	

e. Ventilation Equipment

Measure	Maximum Incentive Amount	Eligibility
Demand Control Kitchen Ventilation – Electric	Up to \$600.00 per total fan Horse Power (exhaust fan HP + supply fan HP) For units 2 – 30 total HP	A list, based on the Food Service Technology Center (FSTC) will be made available to commercial kitchen equipment dealers and will be posted on the Company's website. Retrofit applications only - new construction is ineligible
Demand Control Kitchen Ventilation – Natural Gas	Up to \$600.00 per total fan Horse Power (exhaust fan HP + supply fan HP) For units 2 – 30 total HP	A list, based on the Food Service Technology Center (FSTC) will be made available to commercial kitchen equipment dealers and will be posted on the Company's website. Retrofit applications only - new construction is ineligible

f. Commercial HVAC Retrofit

Commercial HVAC retrofit rebates are designed to help PSE's small and medium commercial customers reduce their energy usage without having to upgrade costly rooftop equipment.

Category	Measure	Maximum Incentive Amount Each	Maximum Incentive Amount Each
		Electric	Gas
HVAC	Web Enabled Thermostats	\$200	\$200.00
	Ductless Heat Pumps	\$500.00	N/A
	Advanced Rooftop Controls	\$250.00 Per Ton	\$50.00 Per Ton
	Advanced Rooftop Controls Lite	\$150.00 Per Ton	N/A

Exhibit 3: Program Details

g. Commercial Midstream

The Commercial Midstream incentive program will work with HVAC and Water Heater Distributors to make high-efficiency HVAC equipment more readily available to PSE customers. This will benefit PSE customers who need an emergency replacement install qualified products from locally-stocked resources.

Category	Measure	Maximum Incentive Amount Each	Maximum Incentive Amount Each
		Electric	Gas
HVAC	Air Conditioning and Heat Pumps	\$125.00 Per Ton	N/A
Water Heating	Condensing Water Heaters and Boilers	N/A	\$5.00/Mbtuh

h. Commercial Lighting

Customers may receive incentives for energy efficient lighting upgrades by purchasing efficient lighting products from approved vendors that provide incentives at point of sale.

Measure		Maximum Incentive Amount	Eligibility
LED Lamps	Decorative Lamps	\$2.00	All LED lamps must be listed on the Energy Star® or Lighting Design Lab Qualified Lamp list. All LED fixtures must be listed on the Energy Star®, Lighting Design Lab, or Design Lab Consortium Qualified Fixtures Lists.
	Omnidirectional Lamps	\$2.00	
	MR16 Lamps	\$3.00	
	Directional Lamps (PAR/R/BR20, PAR/R/BR30, PAR/R/BR38/40) and Screw-in Recessed Can Retrofit Kits	\$4.00	
	Hard Wire Recessed Can Retrofit Kits	\$6.00	
Linear Lamps	Retrofit to TLED (Tubular LED)	\$2.00 per lamp	Based on a lamp-for-lamp exchange.

Please note that prescriptive lighting measures are available in the Business Lighting and Commercial/Industrial New Construction program offerings.

Calculated Lighting Measures

Please note: Calculated lighting measures are processed as a part of custom measures at \$0.20/kWh up to a cap of 70% of the measure cost.

i. Commercial Refrigeration

Beverage Cooler Controllers

Measure	Maximum Incentive Amount	Eligibility
Refrigerated beverage cooler controllers	Installed at the customer's site at no charge.	Any non-hardwired commercially used cooler not containing perishable items and will not contain them in the future. Must be part of the direct installation program.

Ice Makers

Ice Harvest Rate (pounds of ice per day)	Incentive Amount	Eligibility
Cube or Nugget units, less than 1,000 lbs/day	\$200.00 per unit	Energy Star® qualified and/or CEE Tier 2 qualified.
Cube or Nugget units, greater or equal to 1,000 lbs/day	\$500.00 per unit	
Flake Units, less than 1,000 lbs/day	\$200.00 per unit	
Flake Units, greater than or equal to 1,000 lbs/day	\$500.00 per unit	

Exhibit 3: Program Details

j. Commercial Water: Heat & Management

Measure	Maximum Incentive Amount	Eligibility
Pre-rinse spray heads 0.65 gallons per minute	Installed at the customer's site at no charge.	Hot water applications only. Food service entities that use PSE electricity or natural gas to heat water.
Aerators 0.5 and 1.0 gallons per minute	Installed at the customer's site at no charge.	Available only where there are hot water applications for customers who use PSE electricity or natural gas to heat water.
Showerheads 1.5 gallons per minute	Installed at the customer's site at no charge.	Available only where there are hot water applications for customers who use PSE electricity or natural gas to heat water.
Heated Dish Well \leq 1 GPH	\$850.00 per unit, gas and electric	Available only where there are hot water applications for customers who use PSE electricity or natural gas to heat water.
Natural Gas water heaters serving Food Service Preparation	Water Heaters: \$1,500.00 per unit	Energy Star® qualified and unit load must serve a commercial dishwasher in facility.
	Boilers: \$1,500.00 per unit	Boiler thermal efficiency must be equal to or greater than 92% and unit load must serve a commercial dishwasher in facility.
Natural gas water heaters serving Commercial Laundry use	Water Heaters: \$1,500.00 per unit	Energy Star® qualified and unit load must serve commercial laundry use in facility.
	Boilers: \$1,500.00 per unit	Boiler thermal efficiency must be equal to or greater than 92% and unit load must serve commercial laundry use in facility.

Commercial Water: Heat & Management, continued

Measure	Maximum Incentive Amount	Eligibility
Natural gas water heaters serving Education	Water Heaters: \$1,500.00 per unit	Energy Star® qualified.
	Boilers:\$1,500.00 per unit	Boiler thermal efficiency must be equal to or greater than 92%
Tankless natural gas water heaters serving Food Service Preparation	Water Heaters: \$1,500.00 per unit	Energy Star® qualified and unit load must serve a commercial dishwasher in facility.
	Boilers:\$1,500.00 per unit	Energy Star® qualified and unit load must serve commercial laundry use in facility.
Tankless natural gas water heaters serving Laundry use	Water Heaters: \$1,500.00 per unit	Energy Star® qualified and unit load must serve commercial laundry use in facility.
	Boilers:\$1,500.00 per unit	Boiler thermal efficiency must be equal to or greater than 92% and unit load must serve commercial laundry use in facility.
Tankless natural gas water heaters serving Education	Water Heaters: \$1,500.00 per unit	Energy Star® qualified.
	Boilers:\$1,500.00 per unit	Boiler thermal efficiency must be equal to or greater than 92%

4. Direct-Install Program

a. Eligibility

Qualifying customers are owners, customers and tenants, with appropriate owner consent, of small to mid-sized business structure receiving electricity through PSE commercial Rate Schedule 24, 25 (under 10,000 square feet) and 31G.

Common area facilities supported by commercial meters in multifamily buildings, as defined in electric and gas Schedules 217 and 218 of this Tariff; and structures under construction, as defined in electric and gas Schedules 250, are ineligible for this program.

Qualifying agriculture customers own or operate greenhouses, dairies, livestock production, nurseries, crop farms, food processors, and the like, billing with annual gross sales of \$250,000 or less, or on gas rate schedule 31.

Exhibit 3: Program Details

Measures are installed at the customer's site directly by the third party implementer and/or a qualified Contractor Alliance Network representative.

b. Measures

Measure categories include, but are not limited to those in the following tables:

Direct Install Electric Measures

Measure	Eligibility
Aerators	Rated at 0.5 and 1.0 gpm to be installed in hot water applications only. For customers who use electricity or natural gas to heat water. 1.0 gpm aerators will only be installed in commercial kitchens or lodging guest rooms.
Anti-Sweat Heater Controls	Must install a device that reduces the energy consumption of the anti-sweat heaters by at least 50% for the glass door (if applicable) and door frame. Technologies that reduce energy consumption of anti-sweat heaters based on sensing humidity only. Does not apply to doors equipped with low/no anti-sweat heat.
Auto Door Closers	For reach-in cases, customers shall install new auto door closers which should be applied to the glass door of reach-in case. The reach-in door must have a minimum perimeter of 15 feet. For walk-in cases, the auto-closer should be applied to the main insulated solid door of a walk-in freezer or cooler. The auto closer must be able to firmly close the main door of the walk-in whenever it is closed to within one inch of full closure.
Bi-Level Lighting	Occupancy controlled bi-level lighting in stairwells through direct install at no cost to the customer. This measure assumes an existing 2-lamp T-12 or T8 fixture. Bi-level stairwell fixtures with occupancy control are intended for use in areas where high levels of illumination are required to be on all the time to meet emergency egress code requirements in spite of the fact that these areas are often unoccupied.
ECM	Electronically commutated motors (ECMs) will replace shaded pole (SP) motors for display case and walk-in evaporator fans. PSE customers shall purchase and install the ECMs or have ECMs installed by PSE's SBDI program. The customer is responsible to ensure any applicable Energy Code requirements are met.
Gaskets	Must replace a worn or damaged gasket on a reach-in glass door of a low or medium temperature display case, walk-in freezer and/or walk-in cooler. Gasket is considered "damaged" if a hand can be placed through a gasket and the frame, and a tear is 6" and greater. Replacement gaskets must meet the manufacturer's specifications regarding dimensions, materials, attachment method, style, compression, and magnetism.
HID Retrofits	LED fixtures installed under this rebate must be qualified under one of the following programs: Energy Star, DesignLights Consortium, or the Lighting Design Lab. Each exterior fixture installed will have a photocell.

Direct Install electric measures, continued

Measure	Eligibility
In-Room Occupancy Sensors (Lodging)	Lodging Customers shall install either stand-alone guest room HVAC occupancy controls with automatic, unoccupied setback capabilities or a networked guestroom control with similar capabilities. Unoccupied set points must be a minimum of 5 degrees F from the occupied set point.
Integral LED	LED lamps installed under this rebate must meet the same qualifications as programs: Energy Star, DesignLights Consortium, or the Lighting Design Lab.
LED Canopy Lighting	LED fixtures installed under this rebate must be qualified under one of the following programs: Energy Star, DesignLights Consortium, or the Lighting Design Lab. Each fixture installed will have a photocell. To align with PSE's other commercial lighting program, the following specifications also apply: Must replace existing 320w or 400w HID fixture with a LED fixture; the fixtures must be hardwired to prevent the future installation of less-efficient lamps; LED lights must have minimum CRI of 80 and provide a minimum of 70% of initial lumens at 50,000 hrs; Manufacturer's warranty must be a minimum of five years.
LED Exit Sign	LED Exit Signs must use 5 Watts or less and have a 5 year Manufacturer's Warranty.
LED Open Sign	Installed signs must have an efficiency (lumens/Watt) of 80 or greater, must be complete new LED fixtures, and LED Replacement signs will operate at a maximum of 11-watts when on, and draw zero measureable watts when off.
Night Covers	A night cover applied to open-type refrigerator and freezer display cases in vertical, semi-vertical, and horizontal displays. The night cover must be in place at least six hours in a 24-hour period.
Occupancy Sensors	Must allow for both infrared (IR) and sonic detection
Packaged Terminal Heat Pump	New packaged Terminal Heat pumps must meet or exceed current Washington state energy code by a minimum of 10%.
Pre Rinse Spray Valve	Rated at 0.65 gpm to be installed in hot water applications only. Food service entities that use gas to heat water.
Refrigerated Case Lighting	Must consume between 4.0 and 7.5 W of electricity per lineal foot and listed on either the Lighting Design Laboratory or the Design Lights Consortium qualified lists for linear LED lamps. Fixtures must be hardwired.

Exhibit 3: Program Details

Direct Install electric measures, continued

Measure	Eligibility
Retrofit to TLED	Baseline savings will be based on the existing T12 or T8 lamp wattage and replacement using a 10W TLED lamp. Fluorescent lamp and ballast will be removed and replaced with a ballast by-pass TLED. Lamp must be ENERGY STAR or Design Lights Consortium Listed.
Showerheads	Must replace existing showerhead (assumed 2.5 GPM) with a 1.5 GPM showerhead.
Smart Strips	Must be UL listed, Installed in Workplace setting. Measure does not include timer strips. May be load or activity sensing.
Strip Curtains	Strip curtains, made generally of clear PVC strips, must be nominally between 4' to 8' wide and between 0.060" to 0.080" thick and clear enough to allow for see-through visibility. This measure consists of new strip curtains installed on doorways of refrigerated freezer or cooler boxes. This measure is NOT eligible for display cases or for replacing existing strip curtains.

Direct Install Natural Gas Measures

Measure	Eligibility
Pre-rinse sprayers - gas heated hot water	Rated at 0.65 gpm to be installed in hot water applications only. Food service entities that use gas to heat water.
Aerator - gas heated hot water	Rated at 0.5 and 1.0 gpm to be installed in hot water applications only. For customers who use electricity or natural gas to heat water. 1.0 gpm aerators will only be installed in commercial kitchens or lodging guest rooms.
Super Low Flow Showerhead - gas heated hot water	Must replace existing showerhead (assumed 2.5 GPM) with a 1.5 GPM showerhead.
Web Enabled Thermostats	<ol style="list-style-type: none"> 1) Must be connected and able to be accessed remotely 2) Must be able to maintain settings during power failure. 3) Must allow seven-day programming, temporary manual override and manual selection for fan operation.
In Room Occupancy Sensors	Hospitality Customers shall install either stand-alone guest room HVAC occupancy controls with automatic, unoccupied setback capabilities or a networked guestroom control with similar capabilities. Unoccupied set points must be a minimum of 5 degrees F from the occupied set point.
Natural gas water heaters or boilers	<p>Water heaters must be Energy Star® qualified and installed in foodservice, laundry, or educational facilities.</p> <p>Boiler thermal efficiency must be equal to or greater than 92% and installed in foodservice, laundry, or educational facilities.</p>
Tankless natural gas water heaters	Water heaters must be Energy Star® qualified and installed in foodservice, laundry, or educational facilities.

c. Incentives

The majority of the measures are provided at no cost to the customer. Complex measures will require a co-pay by the customer. Incentives payments for measures with a co-pay will be in alignment with the other rebate programs. Incentives are paid to the service provider and/or contractor, and are not intended to be a direct-to-customer rebate.

5. 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.

Exhibit 3: Program Details

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.

6. 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, heat mapping, 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, self-service 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, as well as measuring satisfaction post-installation.
- **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

Exhibit 3: Program Details

- 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) program is 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.
- Pilot "transcreation" for in-language outreach for SBDI; including outreach materials and utilization of contracted multi-lingual outreach associates.

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.

Exhibit 3: Program Details

- 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 team 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.



V. 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).⁸ Further information about NEEA's history, structure, initiatives and press is available on [NEEA's website](http://neea.org).

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.

⁸ 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 2019 Operations Plan.

NEEA estimates that the first of these products to yield therm savings may potentially be 0.67 natural gas water heater⁹. There is also a slight chance that the gas heat pump water heater may also yield savings in the Northwest Region, although it is too soon to estimate the amount of savings or state in which the potential savings may be acquired.

PSE's share of the natural gas market transformation funding is 41.25 percent, with a 2019 total of \$2.43 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.

⁹ 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.

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.

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 focus on measures like phase balancing and conservation voltage reduction (CVR) (also referred to as voltage optimization [VO]). The methodology used to determine CVR savings is the Simplified Voltage Optimization Measurement and Verification Protocol provided by the Regional Technical Forum.

CVR projects involve several stages of implementation including characterization of targeted substations, analysis of CVR systems improvements on targeted substations, implementation of phase balancing, installation of regulators, installation of line capacitors, application of voltage optimization, documentation of voltage settings, and quantification of final CVR energy savings.

CVR is a cross-collaborative effort between PSE departments including Energy Efficiency, Resource Planning & Analysis, Smart Grid Technology Planning & Analysis, and Major Project Management. These internal departments work to quantify savings potential across PSE's substations, align CVR implementation with the planning of system-wide T&D technology upgrades, implement CVR projects at PSE's substations, and collect project specific details for program tracking.



VI. PORTFOLIO SUPPORT

Exhibit 3: Program Details

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 non-qualified 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):¹⁰

"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.

Verification of energy efficiency installations: 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.

¹⁰ Agreed Conditions for Approval of Puget Sound Energy, Inc.'s 2010-2011 Biennial Electric Conservation Targets under RCW 19.285, Docket No. UE-100177.

Exhibit 3: Program Details

Verification of energy savings: 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

Exhibit 3: Program Details

- Electric League of the Pacific Northwest,
- Energy Solutions Center (ESC), and
- Northwest Energy Efficiency Council (NEEC).

Table VI-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 VI-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)	
What is it?	ASE’s mission (from www.ase.org) is to promote energy efficiency worldwide to achieve a healthier economy, a cleaner environment and energy security. The Alliance is the sum of more than 140 Associates and a diverse and bipartisan Board of Directors.
Why?	ASE’s event objectives align with PSE interests in supporting local and regional energy efficiency initiatives. They further support customer awareness of PSE Energy Efficiency programs and achievement of the 2018-2019 Energy Efficiency program targets. ASE has assured PSE in separate correspondence that none of PSE’s contribution will be used for lobbying purposes.
What for?	PSE is participating as a supporter and co-sponsor of the ASE Event “Accelerate Energy Productivity 2030.”
Event/Sponsorship?	Sponsorship

Table VI-1, continued

BOMA	
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

Exhibit 3: Program Details

Table VI-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 VI-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.

Exhibit 3: Program Details

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 [City of Seattle](#) 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, in person, and through social media.

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, and 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 team members are 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.

Exhibit 3: Program Details

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 energy-efficiency 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, e-newsletters 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),¹¹ 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, e-newsletters 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. Customer Awareness Tools

The Customer Awareness Tools category is comprised of four electronic services provided to PSE customers via a variety of media, designed to fit customers' communication expectations. The services include:

1. Unusual Usage Alerts (UUA)

- Unusual Usage Alerts, or UUA's are sent to customers when their energy usage is abnormal compared to the previous year.
- Since the service's inception, over 600,000 PSE customers have received the alerts.
- Unusual usage alerts are triggered when a customer is trending to use more than 30 percent of they used for the same billing cycle the year prior.

2. My Energy Usage

- When PSE customers log onto their myPSE account, they can view their energy usage center, which is moderated by PSE's contractor.
- Additionally, the energy usage center also allows customers to select ways to be more energy efficient to help them save energy.

¹¹ Specific customer details; addresses, names, account information, etc. are rigorously protected. Instead, only general, non-specific comparisons will be provided.

Exhibit 3: Program Details

3. Seasonal Readiness Emails (SRE)

- PSE's contractor sends up to 250,000 reports to customers twice a year during the changing seasons, once in the summer and once in the winter.
- Since 2017, the open rate was over 33 percent for both the summer and winter notifications.

4. Customer Engagement Tracking (CET)

The [Customer Engagement Tracker \(CET\) survey](#) is an instrument designed to explore utility customer reactions to the Home Energy Reports program and other related outreaches. The instrument incorporates a variety of standardized questions that enable applicable comparisons to other surveyed contractor utility deployments, representing over 69,000 customer interviews across 44 distinct utility partners. At PSE, the instrument aims to accomplish the following key objectives:

- Explore customer interaction with and reception of the Home Energy Reports; for both those in PSE's legacy deployments as well as the 2014 expansion groups,
- Gauge overall impact of the program on the PSE customer relationship, both via self-reported influence and by measuring differences in engagement between program participants and non-participants (controls).
- Compare results between PSE deployments and to those of other contractor utility partners, with an eye towards potential program improvements.

L. ShopPSE

ShopPSE is Energy Efficiency's online retail website:

<https://shop.pse.com/>

That provides PSE customers with a wide variety of energy-savings devices, including LED lamps and showerheads.

M. 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).

N. 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.

Participation in events 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 Events 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 activities using an event management data system to improve communication and customer experience. The team assesses event requests and reviews 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.

O. 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.

Exhibit 3: Program Details

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.

P. 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. We will skip a school year when we do not collaboratively identify a viable proposed project.

The Energy Education program also identifies opportunities for 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. Integral to its education program, PSE works with the Independent Colleges of Washington, which are comprised of:

- Gonzaga University,
- Heritage University,
- Pacific Lutheran University,
- Saint Martin's University,
- Seattle Pacific University,
- Seattle University,

- University of Puget Sound,
- Walla Walla University,
- Whitman College,
- Whitworth University.

PSE works with those specific to the PSE service territory, however:

- Pacific Lutheran University,
- Saint Martin's University,
- Seattle Pacific University,
- Seattle University,
- University of Puget Sound.

Exhibit 3: Program Details

PSE intentionally left this page blank.

VII. RESEARCH & COMPLIANCE

A. Conservation Supply Curves and Strategic Planning

The Conservation Supply Curve and Strategic Planning roles include, but are not limited to:

- Internal and external research, planning and development,
- Biennial and strategic program planning support,
- Coordination with regional organizations including NEEA and RTF,
- Holistic assessment of Measurement & Verification protocols,
- Developing and managing IRP and related DSR bidding activities, and
- Programs Cost-Effectiveness.

1. 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).

a. Description

PSE's will complete its IRP and Conservation Potential Assessment (CPA) in 2019. The CPA will assess the economic potential for electric and natural gas energy savings from energy efficiency and other demand-side resources, covering the twenty year period 2020-2039. The budget includes costs to complete the conservation potential assessment, reporting for the IRP, and development of inputs for biennial program planning. This analysis will be a key component for establishing program savings targets and avoided costs in the 2020-2021 biennium.

2. Strategic Planning

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

b. 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 2019 will be continued 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 regional Commercial Building Stock Assessment in PSE's service area.

B. 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:

Baseline Research with Broad Applications: 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.

Exhibit 3: Program Details

Application-Specific Research: 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 purchase existing demographic data from third-party providers, rather than conducting original research to collect this information.

C. 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 has contracted with one third-party evaluator, Opinion Dynamics, for all programs except Home Energy Reports (HER). This approach will encourage greater efficiency and integration of data and results. The HER program will continue to be evaluated by DNV-GL, the same consultant used in previous years, to maintain analytical consistency and continuity.

In 2018-2019, PSE will endeavor to examine all of its tariffed programs within that two-year period. Evaluation resources will be more focused on non-residential programs in 2019 after emphasizing residential programs in 2018. 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.

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. PSE piloted use of EM&V 2.0 techniques in 2016-17 and concluded that application to commercial/industrial projects was promising. To that end, PSE is developing expanded applications 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. In 2019, PSE will be incorporating M&V 2.0 advanced analytics into its core evaluation activities, with a particular focus on performance of the C/I Retrofit, Commercial Strategic Energy Management, and Large Power User programs. Part of this work will include assessment of the extent to which M&V 2.0 techniques can replace or supplement traditional impact evaluation and project verification methods.

After an evaluation deliverable 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.

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

D. Biennial Electric Conservation Achievement Review (BECAR)

The Evaluation organization is also responsible for managing PSE's 2016-2017 Biennial Electric Conservation Achievement Review (BECAR) required by WAC 480-109-120(4)(b)(v).

Exhibit 3: Program Details

In partnership with Commission Staff, PSE implements an independent review of its biennial electric savings. Every two years, PSE and Commission Staff, with review by PSE's CRAG, selects a consultant to conduct the independent electric savings review for the biennium. The review examines electric savings baselines, measure savings calculation methodology, tracking and reporting accuracy, validates reported electric savings, reviews Company actions taken in response to the recommendations from the previous BECAR, and assesses whether the company has undertaken follow-up actions on program evaluation studies completed after the 2016-17 BECAR.

The independent consultant that conducts the BECAR also makes recommendations for PSE operations, measure savings calculation methodology, and data collection. The independent consultant may also make recommendations for electric savings adjustments, which PSE considers and reviews with the CRAG prior to implementing any revisions.

PSE provides the CRAG with interim BECAR status and reports throughout the biennium, and includes the BECAR final report as an appendix to its Biennial Electric Achievement Report to the Commission, in accordance with WAC 480-109-120(4).



VIII. OTHER ELECTRIC PROGRAMS

A. Customer Connected Solar

Customers that interconnect a qualifying renewable system PSE (“Customer-Generators”) are eligible to participate in PSE’s Net Metering program (terms of the program are outlined in Schedule 150) and/or in the WA State Renewable Energy Production Incentive program (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, metering and billing to 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. PSE is required to offer service under this schedule on a first-come, first-served basis until the total of cumulative nameplate generating capacity reaches 22.4 MW. This requirement was met by PSE in 2015 and as of June 2018 PSE has a total of 50 MW of net metered generation operating in our service territory. 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.

c. Eligibility

Customer-Generators who operate fuel cells or produce electricity and used and useful thermal energy from a common fuel source or who generate electricity using hydroelectric, solar, or wind energy or biogas from animal waste as fuel, with a total capacity of no more than 100 kilowatts (kW) and the generation is located on their own premises. Such generator must operate in parallel with PSE’s transmission and distribution facilities. Detailed availability is outlined in PSE’s Schedule 150.

d. 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.

e. 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. 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. There is currently no set end date for the net metering program.

2. Production Metering

Schedule 151

a. Purpose

The WA State Renewable Energy Production Incentive Program is a production-based financial incentive for customers with solar, wind, and bio-digester generating systems. PSE voluntarily administers this state incentive to qualified customers, as determined by Washington State University Energy Extension, the WA State Program Administrator.

b. Description

In order for a customer-generator to participate in Schedule 151 they must:

- Be a PSE customer with a valid interconnection agreement with PSE for the operation of their grid-connected renewable energy system.
- Have a system that includes production metering capable of measuring the energy output of the renewable energy system.
- Be certified (as named on the PSE account) by the Washington State Program Administrator as eligible for annual incentive payments.

Exhibit 3: Program Details

c. Annual Payments

Production payments administered by PSE are recovered through WA State taxes.

Legacy Program participants with systems installed and certified prior to October 1, 2017 will receive payments up to \$5000 per year for electricity produced through June 30, 2020 at the following rates:

Customer-Generated Power	Price per kWh
Solar modules and inverter manufactured in Washington state	\$0.504
Solar modules manufactured in Washington state	\$0.336
Solar or wind generating equipment with an inverter manufactured in Washington state	\$0.168
Any other PV system or anaerobic digester	\$0.14
Wind turbine	\$0.112

Participants with State Certification on or after October 1, 2017, who maintain ongoing eligibility requirements are eligible for up to eight years of annual incentive payments on kilowatt-hours generated July 1, 2017 through no later than June 30, 2029. Individual participant eligibility for a given rate, term, payment limit, and annual incentive payment amounts are determined by the Washington State Program Administrator, based on RCW 82.16, including the following incentive rate guidelines:

Fiscal year of system certification	Base rate residential scale	Base rate commercial-scale	Made-in-Washington bonus
2018	\$0.16	\$0.06	\$0.05
2019	\$0.14	\$0.04	\$0.04
2020	\$0.12	\$0.02	\$0.03
2021	\$0.10	\$0.02	\$0.02
Annual limit per Participant	\$5000	\$25,000	

Annually, PSE will measure and report the kilowatt-hours generated by participants' renewable energy systems and make incentive payments to eligible customers as determined by the Washington State Program Administrator. Individual participant eligibility for a given rate, term, payment limit, and incentive payment amounts will be determined by the WA State Program Administrator.

d. Customer Incentives

Annually, PSE will measure and report the kilowatt-hours generated by participants' renewable energy systems July 1st through June 30th and make incentive payments to eligible customers as determined by the Washington State Program Administrator. Individual participant eligibility for a given rate, term, payment limit, and incentive payment amounts are determined by the WA State Program Administrator.

e. Target Market

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

f. Marketing Plan

Marketing of both Net Metering and the WA State Production Incentive Program is primarily done by the local solar industry and advocates. PSE focuses on education of these partners and making information about the process available to all prospective and existing solar customers. PSE does this through:

- www.pse.com/savingsandenergycenter/customer-connected-solar
- Energy Advisors
- Contractor Alliance Network trainings and communications
- Speaking engagements such as Solar Washington forums
- Customer Renewables brochure used at various events.

IX. GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

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

AIA	American Institute of Architects
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BOMA	Building Owners and Managers Association
BPA	Bonneville Power Administration
CHP	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

Exhibit 3: Program Details

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
NEEA	Northwest Energy Efficiency Alliance
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