



Energy Efficiency

Exhibit 3

2017

Program Details



**PUGET
SOUND
ENERGY**

All cover photo subjects used with permission.

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
D.	PROGRAMS, FUNCTIONS, AND SERVICES COMMON TO CONSERVATION-SAVINGS PROGRAMS	3
1.	<i>Contractor Alliance Network</i>	3
II.	RESIDENTIAL ENERGY MANAGEMENT	4
A.	LOW INCOME WEATHERIZATION	5
1.	<i>Purpose</i>	5
2.	<i>Description</i>	5
3.	<i>Customer Incentives Overview</i>	6
4.	<i>Education, Communication & Awareness</i>	9
B.	SINGLE FAMILY EXISTING	12
1.	<i>Purpose</i>	12
2.	<i>Description</i>	12
3.	<i>Customer Incentives</i>	12
C.	DIRECT-TO-CONSUMER CHANNEL	14
1.	<i>Description: Residential Direct-to-Consumer Programs</i>	14
2.	<i>Marketing and Outreach Plan</i>	18
D.	DEALER CHANNEL	24
1.	<i>Purpose</i>	24
2.	<i>Description: Dealer Channel Programs</i>	24
3.	<i>Customer Incentives</i>	25
4.	<i>Marketing and Outreach Plan</i>	25
E.	SINGLE FAMILY FUEL CONVERSION	30
1.	<i>Purpose</i>	30
2.	<i>Description</i>	30
3.	<i>Customer Incentives</i>	31
4.	<i>Target Market</i>	31
F.	MULTIFAMILY RETROFIT	32
1.	<i>Purpose</i>	32
2.	<i>Description</i>	32
3.	<i>Customer Incentives</i>	33
4.	<i>Target Market</i>	33
5.	<i>Marketing and Outreach Plan</i>	33
G.	RESIDENTIAL NEW CONSTRUCTION	38
1.	<i>Purpose</i>	38
2.	<i>Description</i>	39
3.	<i>Customer Incentives</i>	40
4.	<i>Target Market</i>	41
5.	<i>Overall Residential New Construction Program Marketing and Outreach Strategies</i>	41
6.	<i>Single Family New Construction Marketing and Outreach Plan</i>	42

H.	RESIDENTIAL PILOTS.....	46
1.	<i>Residential Individual Energy Report Pilot</i>	46
III.	BUSINESS ENERGY MANAGEMENT.....	49
A.	PILOTS.....	50
1.	<i>Small to Midsize Business Efficiency Pilot</i>	50
B.	COMMERCIAL/INDUSTRIAL RETROFIT.....	50
1.	<i>Purpose</i>	50
2.	<i>Description</i>	50
3.	<i>Customer Incentives</i>	52
4.	<i>Target Market</i>	54
5.	<i>Marketing and Outreach Plan</i>	54
C.	COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION.....	56
1.	<i>Purpose</i>	56
2.	<i>Description</i>	56
3.	<i>Customer Incentives</i>	57
4.	<i>Target Market</i>	60
5.	<i>Marketing and Outreach Plan</i>	60
D.	RESOURCE CONSERVATION MANAGEMENT.....	62
1.	<i>Purpose</i>	62
2.	<i>Description</i>	62
3.	<i>Customer Incentives</i>	64
4.	<i>Marketing and Outreach Plan</i>	65
E.	LARGE POWER USER/SELF DIRECTED.....	67
1.	<i>Purpose</i>	67
2.	<i>Description</i>	67
3.	<i>Customer Incentives Overview</i>	68
4.	<i>Target Market</i>	68
5.	<i>Marketing and Outreach Plan</i>	68
F.	ENERGY EFFICIENT TECHNOLOGY EVALUATION.....	69
1.	<i>Technology Evaluation Overview</i>	69
G.	COMMERCIAL REBATES.....	70
1.	<i>Purpose</i>	70
2.	<i>Description</i>	70
3.	<i>Customer Incentives</i>	71
4.	<i>Target Market</i>	71
5.	<i>Marketing and Outreach Plan</i>	72
IV.	REGIONAL PROGRAMS.....	77
A.	NORTHWEST ENERGY EFFICIENCY ALLIANCE.....	78
1.	<i>Description</i>	78
B.	PRODUCTION AND DISTRIBUTION EFFICIENCY.....	79
1.	<i>Purpose</i>	79
2.	<i>Description</i>	79

V. PORTFOLIO SUPPORT	81
A. CUSTOMER ENGAGEMENT AND EDUCATION	82
1. Purpose	82
2. Energy Advisors	82
3. Events	83
4. Energy Efficiency Brochures.....	83
5. Education	84
B. ELECTRONIC MEDIA AND TOOLS	85
1. Purpose	85
2. Description.....	85
3. Customer Digital Experience.....	85
4. Market Integration.....	86
C. AUTOMATED BENCHMARKING SYSTEM	86
1. Purpose	86
2. Description.....	86
3. Target Market	87
D. REBATES PROCESSING	87
1. Purpose	87
2. Description.....	87
3. Target Markets.....	87
E. PROGRAMS SUPPORT.....	88
1. Purpose	88
2. Description.....	88
3. Target Markets.....	89
F. ENERGY EFFICIENT COMMUNITIES	89
1. Purpose	89
2. Description.....	89
3. Target Markets.....	89
G. TRADE ALLY SUPPORT.....	90
1. Purpose	90
2. Description.....	91
3. Target Market	91
VI. RESEARCH & COMPLIANCE	93
A. CONSERVATION SUPPLY CURVES.....	94
1. Objectives.....	94
2. Description.....	94
B. STRATEGIC PLANNING	94
1. Objectives.....	94
2. Description.....	94
C. MARKET RESEARCH.....	95
1. Objectives.....	95
2. Description.....	95
D. VERIFICATION TEAM.....	96
1. Description.....	96
2. Measurement & Verification (M&V)	97
3. Verification Team Guidelines	97

E. PROGRAM EVALUATION.....98

 1. Description.....98

VII. OTHER ELECTRIC PROGRAMS.....101

 A. CUSTOMER CONNECTED SOLAR.....102

 1. Net Metering102

 2. Production Metering.....103

 B. ELECTRIC VEHICLE CHARGER INCENTIVE.....105

 3. Target Market105

 4. Customer Incentives.....105

 5. Marketing Plan105

 C. DEMAND RESPONSE.....105

 1. Background.....105

 2. Next Steps.....106

VIII. GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS.....107

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 is associated with 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 No. UE-152058, and sections A through J and L of the 2010 Electric Settlement Agreement in Docket number UE-100177, including but not limited to:

- (3)(a)(vi)(1) Discussion of efficiency marketing efforts,
- (3)(a)(vi)(2) Discussion of Incentives,
- (5) Program Details filings,
- (7) Discussion of Program Design Principles.

Although not required by EIA-related Orders, The Exhibit 3 program details also include gas program discussions. This is consistent with the Commission’s recommendations in its Policy Statement on the Evaluation of the Cost Effectiveness on Natural Gas Conservation Programs in Docket No. UG-121207.

A. Associated Documents

As a part of its 2017 Annual Conservation Plan (“ACP”) 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 2017, included with the BCP are:

Savings and budgets (both electric and 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 Total Quality 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 October 14, 2016, prior to the filing of the final draft with the Washington Utilities and Transportation Commission ("UTC" or "Commission") on November 15, 2016.

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 2017 offerings and services. Most Program Details² contain the program's:

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

D. Programs, Functions, and Services Common to Conservation-Savings Programs

1. 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.

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

II. RESIDENTIAL ENERGY MANAGEMENT

A. Low Income Weatherization

Schedules E/G 201

The Low Income Weatherization program is included in the Residential Business-to-Business Channel. This is primarily because the majority of customer-facing contact for this organization is through low-income agencies throughout the PSE territory. The program discussion is presented here to maintain the numerical sequence of the Conservation Schedules, as also presented in *Exhibit 1: Savings and Budgets*. The remainder of the Residential Business-to-Business programs (Multifamily Retrofit and Residential New Construction) are discussed following the Residential Fuel Conversion (Schedule E216) program on page 31.

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 2016-2017, 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.

2. Description

Key stakeholders are low-income 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 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
- Furnace or water heater repairs or replacement.

Sources of Low Income Weatherization funding include, but are not limited to, Electric Rider, Gas Tracker, Company funds, BPA credits 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.

3. Customer Incentives Overview

a. All Structures

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

Under the Matchmaker Agreement with Department of Commerce, PSE’s 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
- 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 (gas or electric), product type and product quantity. A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included in this Biennial Conservation Plan as Exhibit 4.

b. Retrofit-- Multi-Family

Prescriptive incentives will be applied to Measures installed within units of 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*.

c. 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.

d. 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 end-user opportunity among key housing agencies' administrators.

In 2016-2017 PSE's goal through communication and surveys, is to better understand how this segment of PSE customers prefer to communicate and receive information.

PSE will continue to build on and extend the partnership with assistance agencies. Where appropriate, PSE will seek public forums to be a visible advocate on behalf of lower-income energy customers. In addition, the Energy Efficient Communities team collaborates with the Marketing team and Program Manager and develops and implements outreach strategies to promote PSE's residential and commercial energy efficiency programs and services to eligible low-income homeowner participants, as well as other PSE offerings that benefit this segment.

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 this way, the Program will be proactive so customers will not be placed in the position to "figure out" PSE assistance program offerings.

The Program will evaluate tools to help customers find program information quickly and easily, such as a web-based zip code locator to connect them with the social service agency in their area. Finally, the Program will explore ways to streamline PSE energy efficiency messaging via cross selling opportunities so customers may see a suite of relevant options available to them through PSE.

Through the use of segmentation tools and community profiling, PSE will provide more customized outreach to populations in need. For example, PSE will explore providing more language translations for program collateral to build program awareness for English-as-a-second language customers. Through customer surveys, the Program will better learn how income eligible customers want to receive information and from that knowledge build relevant awareness tools such as direct mailers, including the PSE brand on agencies materials/tools/websites, and on the ground presence in community centers, churches, etc.

4. Education, Communication & Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. In 2014-2015 PSE conducted a segmentation study, and in 2016-2017 PSE will use the data gathered to deploy targeted outreach and marketing efforts to maximize awareness of the LIW program in areas that are more likely to include income-eligible customers. Some of PSE's key initiatives to elevate education, communication and awareness may include:

- Weatherization Assistance/HELP joint brochure (multiple languages),
- Landlord program awareness brochure,
- Targeted direct mail pieces,
- Optimizing web page,
- Posters,
- Booth and tabletop display or pull up banner,
- Advertisements,
- Participation in National Weatherization Day,
- Social media content and advertisements,
- Press releases,
- Videos,
- Case studies.

Any additional promotions will be done in close coordination with local agencies.

The outreach strategy for the Low Income Weatherization is to work with customers and business partners by providing customers with information about applicable products and services that PSE provides, and help deliver information to property managers/owners/contractors. This will be done through a variety of outreach mechanisms, including multi-family complex open houses, low income customer EE program awareness campaigns, community events, presentations, and internal PSE employee trainings. The Energy Efficient Communities Team will work with the program team lead and marketing to identify ways to reach multifamily partners in conjunction with other mass marketing strategies developed for Direct to Consumer and Dealer Channel's.

Low Income Customer EE program awareness campaigns will 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.

PSE will 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, contractors, manufacturers, retailers, developers, trade allies, and provide administrative efficiencies for PSE in meeting energy efficiency goals.

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

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

3. Customer Incentives

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

- Light-Emitting Diode (LED) lighting including A-line, BR-30, indoor fixture, MR-16, and candelabra.
- Consumer Electronics, including but not limited to advanced power strips, and through PSE's partnership with NEEA.

- Appliances—including refrigerators, freezers, clothes washers, heat pump dryers, and through PSE’s partnership with NEEA.
- Retail, online, leave-behind, and engagement LEDs and showerheads.
- Refrigerator and Freezer Decommissioning – both secondary and primary units.
- Clothes Washer Replacement – focus on older inefficient models to encourage early retirement.
- Weatherization, including windows, insulation air and duct sealing.
- Space heating including hydronic systems, high efficiency furnaces, high efficiency boilers, high efficiency fireplaces, heat pumps, and system controls, such as web-enabled thermostats.
- Water heating, including tank water heaters, heat pump water heaters, and efficient showerheads.

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

C. Direct-to-Consumer Channel

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

1. Description: Residential Direct-to-Consumer Programs

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

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

Highlighted 2016-2017 Programs & Measures:

a. Lighting

As LED market prices decline, PSE has found that the adoption of LED products has increased, while CFL purchases have fallen. The decline in LED market prices means that PSE can continue to decrease LED incentives while still maintaining the same level of funding toward education and marketing of LED technology to further increase adoption to the broader consumer base. Additionally, the decrease in CFL sales and the industry announcement that CFLs will no longer be Energy Star certified in 2017 influenced PSE’s decision to end its CFL program on January 1, 2017.

LEDs have eclipsed CFLs in the marketplace as the leading choice for affordable energy efficient residential lighting.

PSE is adjusting its residential retail lighting program to reflect these changing market conditions. Forecasted sales quantities have been updated to reflect the trend we are seeing in stores. PSE updated our savings values for 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 us to serve our customers with the same great service. To drive process efficiencies and leverage existing market relationships, commercial lighting (Lighting To Go) retail offerings are managed by the Direct to Consumer Channel. Lighting To Go will follow a similar programmatic format to residential lighting, but some additional program details are under the Business Energy Management section, Schedules E262.

b. Refrigerator & Freezer Decommissioning

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

c. Refrigerator Replacement – older inefficient models

PSE discontinued its Refrigerator Replacement measure at the end of 2016.

PSE had seen a steady decline in customer participation, and the measure is not cost effective on its own. PSE continued to offer clothes washer replacement measure. Clothes Washer Replacement – older inefficient models

This measure encourages customers to replace their old, inefficient clothes washer with a basic, efficient model while allowing PSE to remove, decommission and recycle their former unit. PSE will pay for the cost of the new unit, as well as delivery and installation, and for the decommissioning and recycling of the old unit.

d. Heat Pump Dryers

PSE is offering 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% less energy required by traditional dryers.

In 2017, PSE is partnering 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 expects to see a significant increase in Heat Pump Dryer rebates redeemed as a result of the collaboration.

e. Clothes Washers, Freezers, and Refrigerators

In 2016, PSE incentivized the tiers for clothes washers and refrigerators in an incremental structure; \$25 for Tier 1, \$50 for Tier 2, and \$75 for Tier 3. Customer market data has indicated confusion with the rebate structure. As a result, PSE is offering a single rebate dollar amount on any appliance Energy Star rated or above starting in 2017. PSE anticipates that customer satisfaction scores will improve 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.

f. 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 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 gas and electric single family households. With consultation from the CRAG, this program will continue through 2017. In 2014, the Home Energy Reports program was expanded to an additional 100,000 households. This expansion is discussed further under the pilot section of this Exhibit.

g. Web-Enabled Thermostat

PSE's web enabled thermostat program will continue for 2017. Adjustments have been made to unit energy savings values to reflect new research on savings from these units. PSE continues to add new qualified manufacturers who meet our product functionality requirements and have the ability to verify customer connectivity.

h. Advanced Power Strips

An Infrared (IR) sensing advanced power strip is installed with a home entertainment system. This device disconnects power to all devices after a set period with no IR signal. Potential delivery methods for this measure may include, but are not limited to: online retail, brick and mortar retail, mail-by request, and leave behind.

i. Showerheads

PSE offers instant incentives to customers through retail stores, targeted emails, engagement and through shopPSE.

The RTF released new savings for showerhead measures in August of 2016. PSE utilized these numbers to adjust savings reporting for the 2017 program year.

j. Faucet Aerators

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

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

2. Marketing and Outreach Plan

The objectives for the Direct-to-Consumer Channel's marketing and outreach strategy are to reach a wide and diverse segmentation of customers including customers that may not have heard about or participated in PSE energy-efficiency programs.

Customers will be exposed to PSE and energy efficiency messaging and offers at places they may not expect including door-to-door campaigns, festivals/fairs, brick and mortar retailers, online retailers such as shopPSE, social channels, targeted advertising and more. Common themes incorporated into messaging will include clarity, awareness, options of programs/offers and ease of participation.

To continue driving customer participation and awareness, it will be important to orchestrate a distinct, strong, clear concert of messaging and corresponding community engagement: *use energy efficiency to save money and cut your bills*. This unique messaging will be used around products for which PSE provides instant discounts or rebates, as well as products which PSE recommends based on their general benefit to the customer.

Channel promotions will focus on delivering effective customer value through utilizing market research intelligence, such as propensity modeling. The Energy Efficient Communities team will continue to deliver targeted community engagement focusing on specific channel priorities, including but not limited to: appliance recycling, clothes washer replacement, cross-channel campaigns, appliance recycling charity campaign, as well as any new programs which require effective community engagement. Priorities for these communities can be set using the same propensity modeling, which allows PSE to determine ahead of time which customers are most likely to participate and qualify for certain programs without inundating them with things that they don't want. Targeted uses will include advertising, direct-mail, and store signage.

The most convenient and least expensive of the delivery methods to send targeted messaging to customers is through email. The channel will focus on getting more customer emails that can be matched to a PSE account. In addition to sending specific marketing emails about energy efficiency offerings, emails will also be sent at three specific instances:

- 1) When customers are experiencing unusual usage levels midway through their cycle, an email will be sent to notify them of the abnormality and provide links to energy efficiency programs to help bring their usage back in-line with their monthly expectations.

- 2) When a customer's PSE energy statement is ready, they will receive an email reminder with a usage breakdown summary and links to energy efficiency programs to help them better understand and manage their energy use.
- 3) Seasonally, as equipment needs to be checked or serviced, PSE customers will receive an email providing energy efficiency tips and solutions for seasonal concerns.

The Energy Efficient Communities team will also employ the use of an extensive tracking workbook, with the goal of measuring the outreach efforts. Several types of customer contacts will be logged, providing valuable information about past successes and future program design. The marketing and outreach teams will also work with industry leaders in a given field, including but not limited to experts in: email marketing, search engine optimization, advertising and social outreach. PSE wants to know that what it is doing is working and is delivering impactful customer value.

By fully utilizing its market research capabilities, PSE analyzes research data and gather customer opinions on buying habits that help refine its outreach methods. By utilizing subjective and objective data, the Energy Efficient Communities team selects priority communities. This includes looking at past engagement levels in various municipalities, as well as choosing communities which have not received specific attention in previous years.

In 2017, PSE will specifically look to invest in research to identify opportunities to market and promote its energy efficiency programs and rebates to a multicultural/multilingual audience, which tends to be a harder to reach segmentation.

A highly successful tactic in 2014-15 that will be carried into 2016-17 is multi-channel or cross-marketing with other channel initiatives that target a similar audience. A multi-channel integrated approach allows customers a comprehensive look at the full range of energy efficient offerings.

PSE's partnership with retail and manufacturers remains a vital tactic in increasing awareness of program offers. These partnerships allow PSE to get messaging in front of customers at the point-of-purchase or decision making via custom product packaging and in-store signage/clings on or near rebated products.

By collaborating closely with retail and manufacturer partners –both brick-and-mortar and online--PSE can reach customers when they are in the most likely position to make a purchasing decision and influence them to choose energy efficient products.

Several new media tactics will be entertained as they are applicable to program objectives. These tactics may include sponsored posts on social media channels, social media promotions/contests, unique out-of-home advertising, video and digital, TV and radio advertising. The marketing reach of all these new tactics can be amplified by the outreach efforts, which will use established relationships with municipalities and trusted community organizations to spread the message even further.

PSE plans to partner with other community leaders/organizations and thought influencers bringing credibility and trust to the PSE brand on both a corporate level and a channel/program level. Partnering with well-respected organizations in its community that customers are passionate about like local sports franchises (Seahawks/Sounders/Mariners) positions PSE as a trusted community member, bringing PSE and energy efficiency into a space customers may not traditionally think of their energy company being.

Top Marketing and Outreach Strategies and Tactics (by program):

a. Lighting

- Clear point-of-purchase materials/custom packaging (online and in store) that drive customers to purchase the PSE-incentivized option.
- Increase awareness of the variety of quality products on the market.
- Increase awareness that discounted light bulb purchased is because of PSE instant rebate.
- Include specific messaging in outreach presentations (city councils, chambers of commerce, home owners 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; as there is still a perception that LED bulbs are expensive.
- 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. Online engagement may happen through shopPSE, <http://pse.com/shoppse>.

- Continue to educate customers both directly and through the 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.

b. 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, particularly refrigerators that have limited models on the showroom floor, so that when it comes time to make the critical purchase, customers know all the options available.
- 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 independent appliance 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.
- Continue to encourage customers to recycle old, inefficient appliances.
- Continue to drive awareness of and participation in free clothes washer replacement program, a valuable program for customers who may be on a budget - belief that the program is “Too good to be true” is a common barrier to participation.
- Make the connection for customers that their electric utility provides appliance recycling.

c. Showerheads

- Communicate a variety of purchasing options to customers and streamline the process with clear point-of-sale materials and improved online functionality through shopPSE and other online retailers.
- Engagement of PSE's customers with a quality high-efficiency showerhead. This outreach occurs at engagement events throughout its electric and electric-natural gas combined service territory. Unlike the direct-mail delivery, this delivery gives PSE a personal touch where it is able to answer customer questions and engage in other energy efficiency messages. Fulfillment of an engagement showerhead may happen online through 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 gas savings.
- Partner with retailers and manufacturers to provide the best customer value such as, but not limited to; limited-time-offers and merchandising activities.
- Drive awareness of quality shower experience associated with showerheads which can be barrier to adoption for some. High-efficiency showerheads do not mean a low-quality shower.

d. Incremental Marketing Strategies:

- Get customers to the retail stores, both in-person and online, and once there engage them to buy energy-efficiency products that meet PSE's programs. This includes the advertising of PSE's online store, shopPSE, <http://pse.com/shoppse>.
- While shopping, provide customers with a positive interaction with energy-efficiency, even if only for a moment.
- Promote comfort and convenience across all offerings.
- Integrate low income program components wherever possible.
- Collaborate with other events/sponsorships outside of PSE energy efficiency to drive participation and awareness of PSE energy efficiency offerings.
- Cross-channel campaigns and targeted email marketing campaign.

e. Incremental Outreach Strategies:

- Enhance relationships with municipal and community organization partners, positioning them as strong ambassadors of PSE retail offers.
- As social media becomes more of a pay-to-play landscape, place emphasis on community newsletters and billing inserts instead of municipal/organization social media sharing.
- Place Direct-to-Consumer marketing materials in prominent community locations with significant foot traffic to drive awareness.
- Ensure that relevant marketing collateral is distributed at community events.
- Continue collaboration with marketing/communications team to ensure that messaging and timing of outreach activities are consistent.

D. Dealer Channel

1. Purpose

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

2. Description: Dealer Channel Programs

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

a. Home Energy Assessments

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

b. Weatherization

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

c. Space and Water Heating

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

3. Customer Incentives

Eligibility criteria are based on established cost effective tests. The incentives are effective January 1, 2015. A list of all requirements for incentive eligibility and participation can be found on individual incentive or program application forms.

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

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

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

a. Target Market

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

4. Marketing and Outreach Plan

By working directly with contractors and resellers, the Dealer Channel leverages these partnerships to provide program training and equip trade allies with the information they need to promote awareness of PSE's programs and assist customers with accessing rebates. The relationships ensure an excellent customer experience and service that aligns with PSE's objectives.

The objectives for the Dealer Channel's 2016-17 marketing and outreach strategy are as follows:

- Drive awareness of energy efficiency programs available to customers.
- Drive participation in PSE's energy efficiency programs in order to achieve savings targets and goals.

- Educate customers about energy efficient products and offers through online and self-service options.
- Utilize data analytics to effectively:
 - Target high-use, pre-qualified customers.
 - Deliver outreach campaigns in communities where they are needed most.
 - Identify customer segments who have not previously participated.
 - Determine propensity for participation.
- Drive customer referrals to PSE’s Contractor Alliance Network (CAN).
- Integrate PSE’s CAN members into marketing, community and outreach initiatives.

Clear and concise messaging that customers have options to choose the best energy-efficient products for their lifestyle will be a priority in 2016 and 2017. To drive customer awareness and participation, it will be important to craft a distinct, strong and clear concert of messaging and corresponding community engagement: *use energy efficiency to save money and cut your bills*. This messaging will be infused into marketing and outreach tactics and campaigns. Targeted message delivery will include advertising, direct mail, email, social media and PR.

The Energy Efficient Communities team will continue to deliver targeted community outreach focusing on specific channel priorities, including but not limited to: Home Energy Assessments, Weatherization, Space and Water Heat, and Fuel Conversion, as well as any new programs or initiatives that require effective community engagement.

With cost effectiveness concerns around gas conservation measures, it will be critical to market the most cost-effective measures as a top priority. Utilizing data analytics and PSE CAN / service provider relations, effective marketing and outreach solutions will become more necessary in 2016-17 than in past biennial periods.

Marketing and outreach tactics and campaigns will be designed with a focus on thoroughly testing tactics, assessing successes, optimizing as needed, and testing again based upon results. This will require investing in consumer psychology and behaviors that include working with experts in the field, both internally and externally. PSE has to know that what it is doing is working and is truly delivering impactful customer value.

By fully utilizing its market research capabilities, PSE will analyze research data and gather customer opinions on buying habits that will help refine its marketing and outreach methods in order to drive participation. By utilizing subjective and objective data, EEC will select priority communities for 2016–2017. This includes looking at past engagement levels in several municipalities, as well as choosing communities that have not received specific attention in the past. Clarity around general qualifications and ease of doing business with PSE will be a major theme for the Dealer Channel in 2016-2017.

In 2017, PSE will look to invest in research to identify opportunities to market and promote its energy efficiency programs and rebates to a multicultural/multilingual audience.

Integrated contractor outreach and marketing tools will be essential to complete transactions with customers in the “mobile first” era. The marketing team will focus on driving awareness through digital media to promote the use of self-service options such as energy assessments, rebate applications and online material ordering, independent of and in collaboration with the Direct to Consumer team.

Another integral tactic will be multi-channel or cross marketing with the Direct to Consumer channel initiatives and campaigns/promotions that target a similar audience. A multi-channel integrated approach to marketing and outreach gives customers the options they want as well as maximizing PSE’s ability to drive awareness of energy efficiency.

By collaborating closely and co-marketing with manufacturer, distributor and contractor partners, PSE can extend its reach to a larger number of customers who are already in the market to purchase and install energy efficient products. PSE will continue to partner with its network of contractors, manufacturers and distributors to offer customers special discounts and limited time offers on insulation, duct sealing, windows, space heat and water heat equipment.

2016-2017 Top Marketing & Outreach Strategies and Tactics (by program):

a. Home Energy Assessments

- Develop self-service online scheduling platform (service provider supported) and integrate customized PSE EE messaging and offers.
- Utilize customer feedback and testimonials to encourage participation.
- Support CAN / service provider partners with collateral and materials to effectively and efficiently serve and educate customers.

- Provide follow-up resources and exclusive limited time offers for customers interested in efficiency upgrades.
- Continue door-to-door sign-up and email marketing campaigns in communities identified by the Energy Efficient Communities Team and informed by propensity for participation and age of home.

b. Space 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 electric water heater replacement program to market.
- Collaborate with Direct to Consumer channel to cross-promote product and rebate offerings and develop integrated multi-channel marketing and outreach campaigns.

c. Fuel Conversion

- Collaborate with Products and Services group to target natural gas conversion offerings to pre-qualified customers.
- Develop CAN / partner collateral to educate consumers on natural gas rebates and programs.
- Develop door-to-door outreach campaign to build awareness and drive natural gas conversions.

d. Manufactured Home Weatherization

- In collaboration with service partner, provide rebated weatherization services and products to customers in manufactured homes.
- Develop partner collateral and materials to effectively and efficiently serve and educate customers.
- Targeted engagement to reach customers living in manufactured homes.

2017 Revisions:

Through PSE's existing program RFP released in late 2015 and its subsequent impact and process evaluation, it was determined that continuing to outsource the Manufactured Home Weatherization program was not cost effective. During the first

quarter of 2016, PSE transitioned a number of measures, including duct sealing and floor insulation to its CAN partners through a prescriptive rebate structure. In addition, PSE also revised the eligibility criteria of its Home Energy Assessment program to include Manufactured and Mobile Home structures. During 2017, PSE will continue to offer these prescriptive measures through both its CAN partners and Home Energy Assessment service partners.

e. Contractor Alliance Network (CAN)

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

f. Incremental marketing strategies:

- Utilize customer testimonials.
- Integrate partners into the messaging.
- Focus on local and professional services offered through CAN.
- Promote comfort, convenience and options across all offerings.
- Streamline and simplify messaging with clear and easy call to action.
- Develop integrated campaigns and promotions to drive awareness outside of Energy Efficiency and encourage employee participation.

E. Single Family Fuel Conversion

Schedule E216

The Single Family Fuel Conservation program is included in the Dealer Channel suite of offerings, although it is listed in Conservation Schedule 216.

1. Purpose

Residential Energy Management's Fuel Conversion program acquires cost-effective electric energy savings from existing single-family (less than or equal to four units on a parcel) retrofit Measures and services by converting to natural gas customers who use electricity as the primary source for their space heat, water heat, and select appliances.

2. Description

The Company provides incentives for replacing existing electric forced-air or zonal space heating equipment and/or electric water heating equipment with high efficiency natural gas space heating equipment³ and/or high efficiency natural gas domestic water heating equipment.

New for 2016-2017, PSE has added ranges and clothes dryers to the fuel conversion program. Incentives will be provided for replacing existing electric ranges and clothes dryers with the equivalent or better natural gas version of that appliance. For the range to qualify, both the stove top and oven must both be natural gas.

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; consequently PSE incentives may occur at the manufacturer, distributor, contractor, retailer or consumer level. Incentive amounts are based on regionally accepted energy-saving estimates and incremental efficiency Measure costs. These incentives 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.

³ As outlined in the Company's Schedule 216, **Section 1, Availability/Eligibility**, the equipment to which the Customer is converting must be "highly efficient natural gas space and/or domestic water heating..."

Training, education and support by PSE for independent contractors, distributors, retailers, showrooms, sales associates, consumers and partnering organizations are foundational to the success of this program.

3. Customer Incentives

Fuel conversion incentives are prescriptive and based upon the Measure type installed and the kWh usage the Measure offsets. Eligibility criteria are based on established cost effective tests and prior electrical usage as primary heating source for space and/or water heating. The incentives are effective January 1, 2016. A list of all requirements for rebate eligibility and participation can be found on individual rebate or program application forms.

Applicable Existing Single Family Premises Measure category headings include, but are not limited to:

- Space Heating,
- Water Heating,
- Appliances.

4. Target Market

The target market for the Fuel Conversion program is existing Single Family Electric Service customers on or near gas mains with specific annual electricity usage.

PSE estimates that approximately 10 percent of the customer base qualifies for the incentive, creating a finite and specialized niche for conversion opportunities. To date, the majority of conversions are water heater installations. Dealers indicate that 50-70 percent of the water heater conversions require relocation of the equipment to meet the efficiency code requirements. PSE incentives assist customers offset these relocation costs. Another opportunity requiring PSE focus is that of construction costs, such as meter installation and street restoration where natural gas lines aren't yet installed or require overhaul.

F. Multifamily Retrofit

Schedule E/G 217

The Multifamily Retrofit program is a part of the Residential Business-to-Business channel, along with Low Income Weatherization, (page 5), and Residential New Construction (page 38).

1. Purpose

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

2. Description

The Multifamily Retrofit program is designed to increase the uptake and installation of selected energy efficient Measures in existing multifamily buildings with five or more attached residential dwelling units located in PSE's electric and natural gas service areas. The team works with property owners, managers, trade ally contractors, and tenants to encourage program participation. The program also serves multifamily campuses which have a mixture of building types including buildings with less than five units. Multifamily structures and campuses typically have opportunities for upgrades in the units, common areas, and building envelope. Measures may include windows, insulation, and air sealing enhancements; appliance, lighting, and HVAC upgrades; O&M improvements; behavioral modification; and calculated commercial upgrades such as central boilers and solar pool heaters. This program targets installation of energy efficient measures occurring during planned retrofit and replace upon failure. PSE will update current measures list and incentives as needed.

The program continually researches and develops new and innovative means to achieve cost effective energy savings. Examples may include behavioral based programs such as web-enabled thermostats and Strategic Energy Management (SEM). Web-enabled thermostats empower customers with both knowledge and control of their heating costs through a simple user-interface accessed on their smart phone. SEM provides a holistic approach to multifamily property portfolios by engaging managers, maintenance staff, and residents to achieve energy cost savings through behavioral changes, operational improvements, facility maintenance, and attention to utility accounting.

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

3. Customer Incentives

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

4. Target Market

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

5. Marketing and Outreach Plan

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

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

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

The primary promotional strategies include but are not limited to:

a. Industry Events and Membership Collaborations

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

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

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

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

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

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

b. Education, Communication & Awareness

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

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

c. Collateral Development

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

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

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

d. Advertising Campaigns and Media Relations

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

The advertising and media relations tactics used may include:

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

e. Overall Multifamily Retrofit Channel outreach strategies include:

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

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

G. Residential New Construction

Schedule E215, G215; applicable to single family construction

Schedule E218, G218; applicable to multifamily 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.

1. Purpose

The Residential New Construction program acquires cost-effective energy savings from single-family new construction (single, duplex, and townhomes) and multifamily new construction projects that increase the installation of energy efficient Measures into new electric & gas heated buildings constructed in the PSE service territory.

In addition to newly constructed single-family structures, covered under terms of Schedule 215 (for both gas and electric service) Residential New Construction will include multifamily structures, per Washington State Energy Code 2012 Edition (effective July 1, 2013). Multifamily units are covered under terms of Schedule 218 (for both gas and electric service). These structures typically have both in-unit and common area energy-savings opportunities. These include, but are not limited to, energy efficient upgrades to building shell, appliances, lighting, HVAC and water heating systems.

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

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

2. Description

Rebates and incentives are offered to eligible natural gas and electric PSE new construction developers, contractors, trade allies and customers (cumulatively, the program refers to these as “partners”) who are constructing new single-family residential structures and 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 residential 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.

The program includes prescriptive rebates, and/or incentives, and calculated grants. Eligible customers include builders, developers, owners or agents receiving electricity through PSE’s residential schedules 7 (including 17, 27, 37 and 47) and 7A; and commercial schedules 8, 11, 12, 24, 25, 26, and 31; and/or natural gas service 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 areas
- Appliances: Clothes washers

- Water Heating: Boilers, condensing water heaters
- Ventilation; in-unit whole-home or common area
- HVAC equipment upgrades

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

a. Affordable Housing

The Residential 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 2010-2014 (updated September 4, 2012) and Housing and Community Development Needs Assessment (Appendix A) that the availability of affordable housing is scarce for households earning between 40 and 60 percent AMI (average median income), severely insufficient for those below 40 percent AMI, and completely insufficient for below 30% AMI.

There is a glaring and extensive need for more living units in this affordable and workforce housing market sector. It is likewise important to help provide those 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 PSE's communities.

The Residential New Construction team created a higher energy efficiency financial incentive level available to projects that will offer more than 50% of total housing units to those earning 60 percent AMI or lower. In response to this serious affordable housing deficiency and potential void.

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 (gas or electric), product type and product quantity. The incentives are effective January 1, 2016. Energy Efficiency's List of Measures, Incentives and Eligibility are included in the Biennial Conservation Plan as Exhibit 4. PSE may, at its sole discretion, adjust rebates based on market variables.

Incentive amounts and savings values are regularly reviewed by PSE and are based on regionally accepted energy savings estimates and incremental efficiency measure cost.

Rebates may be subject to change in response to revisions in savings estimates, average incremental cost or changes in Federal appliance efficiency standards or State codes.

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

Field inspections and audits will 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 form and invoices/receipts, third party verification and certification of an Energy Star® home, or receive an instant discount through participating trade allies. Incentive requests are screened for completeness of customer entries, and where required for submittal of additional documentation. Incentive processing complies with PSE internal audit standards.

4. Target Market

The target market for this program may include but is not limited to single family and 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. Overall Residential New Construction Program Marketing and Outreach Strategies

- 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.

6. Single Family New Construction Marketing and Outreach Plan

The Single Family New Construction program uses a diverse mix of integrated marketing, promotion, and communication strategies, outreach, 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.

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

a. 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 Northwest Energy Star® Homes and Built Green programs, and to promote the benefits of purchasing a green certified home. 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, Energy Star Homes, and building practices that result in energy efficient homes. Key partners include but are not limited to: Northwest ENERGY STAR HOMES; 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.

In addition, the Energy Efficient Communities team will work with program team lead in a variety of outreach initiatives in 2016-17 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.

b. Education, Communications and Awareness

Maintaining consistent program communication, awareness and energy efficiency educational elements are complimentary to the success of achieving savings target goals. Some of PSE's 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 of MyPSE articles, model home signage, builder cooperatives.
- Cross program positioning: Community Outreach and Education, Gas Growth, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.

c. 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, evites, 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.

d. Multifamily New Construction Marketing and Outreach Plan

The Multifamily New Construction program uses a diverse mix of integrated marketing, promotion, communication strategies, outreach, 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 and energy efficient home.

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

The primary high-level marketing and outreach strategies used to help penetrate the market include the following for 2016-17:

- Identify projects and reach development teams early in design process.
- Host local open houses to educate apartment tenants to EE efforts taken on by their property manager and what they can do on their own.
- 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.

e. 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, Energy Star Homes, 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.

f. Education, Communications & Awareness

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

Some of PSE's 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: Energy Efficient Communities for local outreach and education, Gas Growth, REM.
- Other PSE division collaborations: Customer Construction Services and CRMs.

g. 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, evites, 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.

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 condition (7)(d), pilots will only claim energy savings that achieve energy savings sufficient to demonstrate cost-effectiveness by passing the TRC test.

1. Residential Individual Energy Report Pilot

a. Purpose

The Residential Energy Management Sector will continue its pilot based on its successful Home Energy Reports. The pilot is testing an expansion of individual energy reports in three classifications:

- Non-Urban Customers,
- High Relative User, Low Frequency,
- Electric-Only,
- Refill.

With consultation from the CRAG, this program will continue through 2017.
Program Descriptions

i. Non-Urban Customers

It is PSE's hypothesis that non-urban customers save energy at the same rate as urban customers despite differences in their neighbor distances and more diverse peer groups. The pilot program will be operated with the following guidelines:

- a) Opower and PSE will work jointly to establish selection criteria for dual-fuel customers in a diverse geography of the service territory, particularly a selection of non-urban customers.
- b) PSE and Opower will investigate the minimum population quantity needed to ensure that results are verifiable.
- c) KEMA will perform randomization for these customers to be included.

- d) Opower has enrolled these customers using a staggered rollout, for observation and to receive an average of 6 direct-mailed reports per year and up to 12 email reports per year.

ii. High Relative User, Lower Frequency Customers

It is PSE's hypothesis that this segment of customers who have high pretreatment usage, relative to their home size, will save more energy than those who have lower size-relative pre-treatment usage. Targeting a behavioral program to users who can also receive electronic messaging will allow reduced mailing frequency and costs and yield a higher TRC by delivering most of the long-term savings observed in higher paper-based program designs. The pilot program will be operated with the following guidelines:

- a) Opower and PSE will work jointly to determine which customers to target to ensure maximum saving potential.
- b) PSE and Opower will investigate the minimum population quantity needed to ensure that results are verifiable.
- c) KEMA will perform randomization for these customers to be included.
- d) Opower has enrolled these customers using a staggered rollout, for observation and to receive an average of 5 direct-mailed reports in year 1, 4 direct-mailed reports in years 2+, and up to 12 email reports per year.

iii. Electric-Only Customers

It is PSE's hypothesis that the customer heating type can be determined with enough accuracy to set up a randomized test to quantify energy savings from an electric-only program and to measure cost effectiveness. This pilot program will be operated with the following guidelines:

- a) Opower and PSE will work jointly to determine which customers to target to ensure maximum saving potential.
- b) PSE and Opower will investigate the minimum population quantity needed to ensure that results are verifiable.

iv. Refill Customers

- a) To account for attrition due to customers moving within or outside of PSE's service territory, PSE worked with Opower to create a new segment of customers entitled "Refill". These customers were selected to prioritize electric savings, and do not necessarily meet the criteria established by the three original defined segments. These customers were added to the program mid-2015 and are tracked as an independent segment of customers.
- b) Opower has enrolled these customers, using a staggered rollout, for observation and to receive an average of 6 direct-mailed reports per year and up to 12 email reports per year.

III. BUSINESS ENERGY MANAGEMENT

A. Pilots

Schedule E/G 249

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

Pilots may include tests of Measure cost and performance, customer acceptance and delivery methods. In compliance with condition (7)(d), pilots will only claim energy savings that achieve energy savings sufficient to demonstrate cost-effectiveness by passing the TRC test.

1. Small to Midsize Business Efficiency Pilot

a. Program Update

The Small-to-Midsize (SMB) Pilot program, in partnership with OPower, has ended. The last physical report was mailed to the remaining customer in May 2016. There is no intention to continue the SMB program at the moment. However, PSE is exploring and researching other ways/programs that can be deployed to target SMB customers within our service territory

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. In addition, incentives will be available for fuel switch Measures that convert from electric to high-efficiency natural gas while serving the same end use.

2. Description

PSE works with Commercial and Industrial customers to provide incentives for cost-effective energy efficiency upgrades to lighting, equipment, building shell, industrial process, and select O&M improvements.

These services are provided on the customer's behalf and, where specified by the customer, will be developed in conjunction with design engineers, contractors, and/or vendors.

PSE conducts site assessments to identify savings opportunities, verify existing equipment and system operations, and makes recommendations to customers. PSE also reviews third-party savings estimates and analyses, and when required performs in-house analyses to validate energy savings. PSE works with financial decision makers at the customer's facility to ensure the customer is aware of cost-savings opportunities, including review of energy saving projections that can help obtain favorable financing rates.

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

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

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

a. Business Lighting Grants

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

b. Contracted Programs

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

i. Industrial System Optimization Program (ISOP)

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

ii. Energy Smart Grocer

The program provides audits, technical assistance and Measure-specific financial incentives to grocers who wish to purchase and install energy efficient lighting, refrigeration, HVAC systems and gas efficiency Measures. The program is eligible for both retrofit and New Construction incentives.

3. Customer Incentives

Incentives in effect since January 1, 2016 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 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 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 262E/262G, Commercial and Industrial Incentive Program.

The incentive amount for a Measure is the same as that which is available under Schedule 262E/262G, but energy savings may be calculated based on actual Site-Specific conditions.

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 and performing efficiently.

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

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

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

A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included in the 2016-2017 Biennial Conservation Plan as Exhibit 4.

4. Target Market

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

5. Marketing and Outreach Plan

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

During economic downturn, trends have been an increased quantity of smaller projects, likely due to economic challenges faced by building owners and managers. Business

Energy Management (BEM) has responded to this trend with an increased focus on cost-effective programs tailored to the unique needs of target markets.

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.
- Consider web-based applications and webinars/video trainings as self-service/independent learning tools.
- Leverage other PSE customer-facing departments to communicate PSE Efficiency Program information.

b. Coordination with PSE Staff and Departments

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

- Proactive coordination with Energy Efficient Communities staff.

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

c. Community Outreach

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

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

d. Coordination with Program Providers

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

- Industrial Systems Optimization.

e. Coordination with Trade Allies

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

- Participation in meetings to update trade allies on program offerings.
- Providing information about PSE's role in energy efficiency retrofit projects.

- Coordination with trade allies on PSE energy efficiency program messaging.
- Expansion of Contractor Alliance Network (CAN) into the C/I sector of trade allies.
- Leveraging of the Northwest Trade Ally Network for promotion of lighting efficiencies, and trade ally relations with contractors, engineering design firms and energy services companies (ESCOs).

C. Commercial/Industrial New Construction

Schedules E251, G251

1. Purpose

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

2. Description

PSE works with designers and developers of any large or small new Commercial / 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 may be followed to qualify for 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 lighting projects that have a lighting power density valued listed in the applicable code.

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

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

The third path includes Prescriptive Basis incentives for Measures that are eligible for rebates under Schedule E262/G262, Commercial and Industrial Incentive Program. The incentive amount for a Measure is the same as that which is available under Schedule E262/G262, but energy savings may be calculated based on actual Site-Specific conditions and Code Baseline adjustments, if necessary.

In addition to these paths for New Construction efficiency incentives, PSE makes Energy Smart Grocer program offerings available to new construction projects in the grocery sector, providing expert technical assistance and Measure-specific financial incentives to grocers who wish to purchase and install energy efficient lighting, refrigeration and HVAC systems that exceed Code minimum efficiency requirements or industry standard practice where Code requirements do not exist.

A complete listing of available incentives is provided in Exhibit 4 of the 2016-2017 Biennial Conservation Plan.

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

3. Customer Incentives

Customers provide PSE with project scope, costs and estimated savings. 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 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 may be provided; however, choices that totally eliminate the need to provide an energy source to the site are not eligible.

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 *energy model whole building approach*, PSE will offer an increasing incentive amount for efficient designs that exceed the Energy Code baseline by 10 percent, prorated to a maximum incentive for buildings that exceed the Code baseline by 30 percent or more. The *energy model whole building approach* incentive, based on percent savings, may be reduced if it does not meet the Cost Effectiveness Standard.

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 using multiple energy sources, but to be served with electricity from PSE must demonstrate that the electricity-efficiency as well as 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 may be provided; however, 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/gas Commercial and Industrial Rebate Incentive Program are available for new construction except when required by the applicable Energy Code. Other Prescriptive Basis Incentives are not available within the Schedule 251 program. When a rebated equipment item has an energy interaction with Measures proposed under the *whole building approach* or the *component approach*, *the energy savings for the rebated equipment will be removed from the whole building energy calculations or the component approach energy savings calculation.*

Post Occupancy Building Commissioning: If the customer engages the services of a third party commissioning agent for post occupancy building commissioning, who is independent of the design and construction team, then the customer may be eligible for an incentive. To qualify for this incentive, post-occupancy commissioning will start approximately 9 months after the warranty period starts and complete within an 18 month time period of occupancy.

Post Occupancy Commissioning will focus on optimization of building energy systems including, but not limited to: lighting, HVAC, and building controls.

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

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

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

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

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

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

Energy Smart Grocer. This third party contracted program provides expert technical assistance and Measure-specific financial incentives to grocers who wish to purchase and install energy efficient lighting, refrigeration and HVAC systems that exceed Code minimum efficiency requirements or industry standard practice where Code requirements do not exist.

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 (gas or electric), product type and product quantity. A detailed list of Energy Efficiency Services' Measures, Incentives and Eligibility are included as an Attachment to the 2015 Annual Conservation Plan as Exhibit 4.

4. Target Market

Owners and developers of commercial or industrial facilities to be served by PSE with electricity or natural gas are eligible for new construction incentives.

Also targeted are market actors, including but not limited to, owner's representatives, trade allies, development organizations, property management companies, and financing organizations.

5. Marketing and Outreach Plan

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

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

Market activity for new construction is expected to increase during the 2016-2017 program period yielding new project leads. Due to long lead time for new construction project development, new leads for major projects during 2016-2017 are not likely to contribute energy savings until the 2018-2019 program period.

a. Communications

- Continue creating collateral to reflect customer needs for greater comprehensive understanding of energy efficiency program offerings.

- Revamp content on PSE.com to be more user-friendly, and mobile optimized.
- Update standardized content for public presentations.
- Develop mini-case studies that include new construction commissioning and likely rebates or components. Group multiple case studies together by vertical for a more comprehensive snapshot for similar businesses and industries.
 - Target industries: hospitals, office buildings, national retail chains
- Incorporate messaging around other services PSE provides for new construction projects beyond incentives for improved customer service and greater participation.
- Target communications toward multi-family new construction projects, which are now coming under this program, along with the commercial and multi-family incentives which will be aligned for consistency and simplicity.

b. Community Outreach

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

- Presentations to Chambers of Commerce, Business, Industry and Agriculture 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 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. Resource Conservation Management

Schedules E/G 253

1. Purpose

The purpose of the Resource Conservation 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 Resource Conservation Management Services (RCM) 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 RCM 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 Resource Conservation Manager Services (RCM).

Customers qualify for the RCM 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 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 RCM 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.

An RCM customer employs, contracts, or designates existing staff to implement RCM 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 RCM, setting up an energy-accounting database, writing a company resource management plan, and completing facility action plans. Once start-up deliverables are complete, the customer may qualify for "performance grants" based on achieving energy savings associated with RCM practices and "target grants" for meeting or exceeding pre-established energy-reduction targets.

The RCM 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 RCM agreement in three-year increments to provide continued support and additional performance incentives.

Puget Sound Energy's RCM 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 an RCM program.
- Hiring or contracting a Resource Conservation Manager.
- Developing baselines, policies and guidelines, and facility action plans.

b. Resource Accounting Software

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

c. Technical Assistance

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

d. Education & Training

- Training in fundamental concepts for designated RCM and support personnel such as custodial, maintenance, and facilities staff.
- Educational materials for classroom or building occupant use including checklists, fact-sheets, and calculators.
- Training stipend to support professional development in Building Operation or Energy Management.

e. Energy Data Services

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

f. Cash Incentives

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

The RCM 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 RCM customers to facilitate greenhouse gas accounting and other climate change and sustainability initiatives. The value of this service routinely exceeds those stated in the RCM program scope of work.

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

3. Customer Incentives

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

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

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

4. Marketing and Outreach Plan

PSE's Resource Conservation Manager (RCM) Program utilizes a broad array of marketing materials and training activities to reach its customer base. The nature of the RCM 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 RCM training are critical to convey the value and integrity of PSE's program to new and existing customers.

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

a. Program Communications to Existing Customers

Support the RCM 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 RCM annual meeting with displays and handouts as needed.
- Establish resources and protocol for webinar trainings.

b. Marketing Communications to Existing and Potential Customers

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

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

c. Internal PSE Communications

Communicate key messages about the RCM 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 EE Communities and Business Services groups.
- Review communications developed by EE Communities.

d. Publicity

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

e. Community Outreach

Energy Efficient Communities staff will develop and implement outreach strategies to promote enrollment in the RCM 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, 2015 to December 31, 2018. Customers are given until March 31, 2017 to propose projects that utilize their incentive allocations under the non-competitive phase. Customers not designating projects that fully utilize their allocation forfeit their remaining balance to a competitive phase, in which remaining funds are available to all program participants via competitive bid.

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

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

3. Customer Incentives Overview

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

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

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

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

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within PSE service territory, product type and product quantity. A detailed list of Energy Efficiency Measures, Incentives and Eligibility are available as Exhibit 4 of the 2016-2017 Biennial Conservation Plan.

4. Target Market

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

5. Marketing and Outreach Plan

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

F. Energy Efficient Technology Evaluation

Schedules E/G 261

1. Technology Evaluation Overview

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

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

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

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

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

G. Commercial Rebates

Schedules E/G 262

1. Purpose

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

2. Description

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

- Commercial HVAC (retrofit, demand control ventilation and advanced rooftop controls),
- Commercial Clothes Washers,
- Commercial Water Heating,
- 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 are offered through contracted programs:

- Premium HVAC Service,
- 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 gas Commercial and Industrial Retrofit Program.

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

3. Customer Incentives

Most incentives are a flat dollar amount, usually for a “Measure” or “device” that is a “stand alone” unit. Customers can generally select from qualifying models (for instance, washing machines). Some incentives are a flat amount per “unit size” of the measure, where unit size may be “per ton” or “per horsepower.” In some cases, incentives may be tied to square feet of conditioned space because energy savings depend on the size of the building more heavily than the size of the equipment.

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

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

Measure incentive eligibility criteria are based on, but not limited to, established, industry-standard cost effectiveness tests, structure type and its location within PSE service territory, fuel type (gas or electric), product type and product quantity. A detailed list of Energy Efficiency Service Measures, Incentives and Eligibility are included as an Attachment to this 2015 Annual Conservation Plan as Exhibit 4.

4. Target Market

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

Schedule 448, 449, 458, and 459 customers may utilize their Schedule 258 funding allocation for Measures and incentive amounts offered under this program.

Multifamily related businesses or those with dwelling units are served under the Multifamily Retrofit programs, Schedules E217 and G217.

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

5. Marketing and Outreach Plan

PSE's Commercial Rebates Program will be proactive in using a mix of marketing and communications activities to reach the decision makers and influencers in the following key business sectors, as well as maintain current and accurate promotional information for all Commercial Rebates incentives.

a. Commercial Kitchen & Laundry

To promote commercial kitchen and laundry rebates to restaurants and other owners/managers of commercial kitchens (school cafeterias, corporate cafeterias, church kitchens, etc.), and laundry operations, marketing activities will include:

- Develop targeted marketing strategy to drive awareness of and increase participation in PSE's commercial kitchen and laundry.
- Develop and deliver marketing and outreach strategy to target lodging/hospitality industry and laundry customers in communities based on propensity for participation.
- Identify opportunities to cross-promote commercial kitchen/laundry programs to customers who have already participated in other commercial efficiency programs.
- Collaborate with restaurant supply distributors to co-promote commercial kitchen rebates and incentives.
- Continue involvement in multi-channel initiatives and campaigns/promotions.
- Collaborate with SBDI program to cross-promote commercial kitchen and laundry programs and services to small business customers.

b. Commercial Retail Lighting – Lighting To Go

Following a format that is similar to residential lighting, PSE will continue offering commercial customers retail lighting offerings through the Lighting To Go program.

The program focuses on point of sale and prescriptive lighting discounts, which enhance the customer experience in lighting incentive programs to increase uptake due to the ease of participation.

Under this format, paperwork is reduced for the vendor partner to align more with residential lighting. Some customer data will still be required by the vendor partners at point of purchase so that PSE can send a thank you to the end use commercial customer. Actual installs will not be verified.

Savings, incentives, and quantities have been updated for 2017 to reflect changing market conditions, including the decline in LED pricing, shifting baselines, and customer uptake.

This program is exclusively LED screw-in lamps and plug-and-play lamps like TLEDs (Tubular LEDs). The program is limited to these LED types in order to eliminate any potential risk of duplicate savings from other PSE lighting programs.

Promotional efforts will include:

- Development and continued 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 Retail Lighting program incentives, coordinated closely with other PSE Retail offerings.

c. Premium HVAC

PSE's Premium Service program is promoted through its Contractor Alliance Network Partners and directly to its end use customers through several channels including

- PSE will provide a series of contractor and trade partner trainings throughout its service territory
- Direct outreach to large property management firms. These customers control and maintain large numbers of eligible units.
- Targeted end use customer marketing through direct mail/email campaigns
- Participate in all relevant industry trade shows and other opportunities to connect face to face with target customers and contractors

d. Commercial HVAC

To promote commercial HVAC rebates to targeted commercial owners and building operators, marketing activities will include:

- Develop targeted marketing strategy to drive awareness of and increase participation in PSE’s commercial HVAC programs and services.
- Identify opportunities to cross-promote commercial HVAC programs to customers who have already participated in other commercial efficiency programs.
- Collaborate with manufacturers, distributors and contractors to co-promote commercial HVAC rebates and incentives.
- Continue involvement in multi-channel initiatives and campaigns/promotions.
- Collaborate with Direct Install programs to cross-promote commercial HVAC programs and services to small business customers.

e. Direct Install Programs

To promote Small Business, Lodging and Agriculture rebates and services to targeted commercial owners, building operators, and tenants, marketing activities will include:

- Develop targeted marketing and PR strategy to drive awareness of PSE’s direct install energy efficiency programs and cross-promote other commercial programs to business community.
- Coordinate marketing and promotional efforts to support community blitzes.
- Develop enhanced city engagement strategy to further integrate blitzes in communities and with city officials and chambers of commerce.
- Collaborate with retailers in blitz communities to provide exclusive efficiency offers for commercial and residential customers.
- Cross-promote product and rebate offerings to residential customers in blitz communities.

f. Community Outreach

Energy Efficient Communities staff will develop and implement 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.

With the exception of this sentence, this page is intentionally left blank for pagination purposes.

IV. REGIONAL PROGRAMS

A. Northwest Energy Efficiency Alliance

Schedule E254

1. Description

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

The NEEA 2015-2019 Business Plan, adopted in 2014, focuses on creating lasting change in energy efficiency in the Northwest through strong partnerships with the region's utilities and market actors. The 2015-2019 business plan was developed through a participatory year-long strategic planning process with the NEEA Board and region as a whole. The Business Plan provides for some flexibility, allowing funders to conduct some market transformation activities themselves, and has a five-year total regional savings goal of at least 145 average megawatts (aMW).⁴ Further information about NEEA's history, structure, initiatives and press is available on [NEEA's website](#).

a. Regional Gas 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.

In late 2014, the NEEA Board approved the formation of a regional gas market transformation Collaborative. Funded by the largest gas utilities in the Northwest Region, NEEA will lead the effort to accelerate the adoption of leading-edge gas technologies, with the expected results of achieving increased gas conservation in the long-term.

⁴ 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>

The five-year (2015-2019) budget is \$18.3 million, which will enable NEEA to coordinate the launch and implementation of five measures over that timeframe.

Some of the measures: gas-fired heat pump water heaters, combined space & water heat, rooftop HVAC, and gas clothes dryers, are in the formative stages of their development and are expected to achieve cost-effective savings in the long-term. Others, such as high-efficiency gas fireplaces, are expected to produce cost-effective savings in the nearer term. The overall portfolio is expected to realize lower long-term avoided costs than current gas measures.

B. Production and Distribution Efficiency

Schedule E292

1. Purpose

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

2. Description

The Production and Distribution Efficiency program involves implementing energy conservation Measures within PSE's own production and distribution facilities that prove cost-effective, reliable and feasible.

Within production facilities, conservation Measures reduce ancillary loads at the site and exclude efficiency improvements made to the generating equipment itself. These Measures may include, but are not limited to, lighting upgrades, variable speed drives and compressor upgrades.

For transmission and distribution (T&D) efficiency, improvements are implemented at PSE's electric substations. These improvements can involve reducing the energy use within the substation itself and the distribution of energy from it. They can range from on-site Measures like lighting and heat pumps to system Measures like phase balancing and conservation voltage reduction (CVR) (also referred to as voltage optimization [VO]).

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

With the exception of this sentence, this page intentionally left blank.

V. PORTFOLIO SUPPORT

A. Customer Engagement and Education

1. Purpose

This activity grouping is made up of functions and services designed to drive PSE customer to take action, and engage in energy efficiency initiatives. This group provides customers with information, tools and resources that enable easy enrollment in a number of PSE efficiency offerings. The services address the full spectrum of Energy Efficiency's benefits, and the Customer Engagement and Education Staff often provide the customer's first impression of the Energy Efficiency department.

2. Energy Advisors

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

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

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

Individual Energy Advisors are also located in several PSE Business Offices throughout PSE's service territory to provide direct support for energy-efficiency questions.

Customers have access to speak directly to an Energy Advisor through a toll-free number, **1-800-562-1482**, Monday through Friday, 8am to 5pm.

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

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

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

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

4. Energy Efficiency Brochures

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

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

5. 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.

a. Description

At this time, there are no solidified plans for the Education program in 2016/17, but as opportunities arise, the Energy Efficient Communities team will deliver them through their engagement with the community. The current Independent Colleges of Washington program budget has been moved over to the EE Communities budget.

b. Education Tactics

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

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

B. Electronic Media and Tools

1. Purpose

The Electronic Media and Tools group implements services and activities that focus on PSE customer access to Energy Efficiency programs, via the internet or other forms of electronic media.

2. Description

This Electronic Media and Tools team is made up of Customer Digital Experience and Market Integration, which are detailed in the following paragraphs. The Automated Benchmarking System is discussed in the following section.

3. Customer Digital Experience

a. Purpose

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.

b. 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 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, help customers understand the specifics behind their energy usage, show neighbor comparisons (residential customers),⁵ 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>).

4. 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).

C. Automated Benchmarking System

1. Purpose

This website, called *MyData* and launched in the autumn of 2013, provides building owners an easy to use, self-service portal that will allow users to set up automated monthly reporting of their building's usage.

2. 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 registering your property, you will be a part of what is becoming an industry standard and will receive quick and accurate data on a monthly basis for your entire building.

⁵ Specific customer details; addresses, names, account information, etc. is rigorously protected. Instead, only general, non-specific comparisons will be provided.

This tool will enable you 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.

3. 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.

D. Rebates Processing

1. Purpose

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.

2. 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.

3. Target Markets

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

E. Programs Support

1. Purpose

Programs Support functions include data management, tracking and reporting services provided by Data and Systems Services staff, as well as research, planning, and development work by Program Development staff, all supporting implementation of Residential and Business Energy Management customer programs.

In addition to mainstream *energy* management development work, customer load (or *capacity*) management assessment, planning, and development interests are included in the Programs Support budget.

2. Description

The Programs Support budget is predominantly labor and includes training, planning and development costs projected by Programs Support staff.

Data and Systems Services roles include:

- Planning, development, support, and enhancement of EE systems and tools (including the department's new DSM system (DSMc) for managing and tracking energy efficiency programs, projects and measures);
- Management of reporting, forecasting, and business performance metrics;
- Conducting analytics by understanding and presenting program data as meaningful knowledge and insights.

Program Development roles include:

- Internal and external research, planning and development;
- Biennial and strategic program planning support;
- Customer experience – EE program participation surveys;
- Customer load control / ancillary services assessment;
- Coordination with regional organizations including NEEA and RTF;
- Holistic assessment of Measurement & Verification protocols;
- Developing and managing IRP and related DSR bidding activities;
- Programs Cost-Effectiveness;
- Trade ally support; and
- Best practices and continuous improvement.

A market study assessing the potential for automated dispatchable customer load control was completed in early 2015. Results from the assessment study may be included in the 2015 IRP. Pending assessment study reviews, stakeholder interests, business case, and related approvals, Program Development resources may be applied toward a pilot in this biennium.

3. Target Markets

Programs Support staff serve PSE's Residential and Business Energy Management groups' data and systems services, planning, and development needs.

F. Energy Efficient Communities

1. Purpose

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.

2. 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.

3. Target Markets

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

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

Energy Efficient Communities works closely with the Energy Efficiency program teams to reach out to the underserved markets to deliver consistent programs throughout the service area. The team works to find areas with lower program participation to directly target engagement with customers. They provide leads for the small business programs through partnerships with cities and community groups, through designing door to door engagements as well as through presentations to the small business community.

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

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

G. Trade Ally Support

1. Purpose

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.

2. 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.

3. Target Market

Organization memberships budgeted in Trade Ally Support for the 2016-2017 biennium include (but may not be limited to):

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

VI. RESEARCH & COMPLIANCE

A. Conservation Supply Curves

1. Objectives

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 gas energy resource acquisition strategy, as well as the targets for its energy efficiency programs. The IRP analysis is also used to derive the ten-year conservation potential as required by WAC 480-109-100(2), to comply with the Washington Energy Independence Act (often referred to as I-937).

2. Description

PSE's next IRP and Conservation Potential Assessment are due in 2017. The Company will conduct an assessment of the long-term market potential for electric and natural gas energy savings from energy efficiency and other demand-side resources, covering the twenty year period 2018-2037. PSE anticipates continued use of a consultant to perform the analysis. The budget includes costs to complete the conservation potential assessment and incorporate the results of that assessment in the resource portfolio analysis. This analysis will be a key component for establishing program savings targets for 2018-2019.

B. Strategic Planning

1. Objectives

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

2. 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.

C. Market Research

1. Objectives

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.

2. 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.

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. In particular, PSE utilizes an online residential research panel of approximately 3,000 customers as a very economical survey tool, as well as purchasing existing demographic data from third-party providers, rather than conducting original research to collect this information. In the 2016-17 biennium Market Research will build propensity models to refine targeted marketing of energy efficiency programs. Market Research will also focus on standardizing survey efforts across energy efficiency offerings to better gauge customer acceptance and program performance levels.

D. Verification Team

1. Description

As the “V” 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.

2. Measurement & Verification (M&V)

M&V is the process of determining and validating savings, where equipment energy usage may be measured and equipment installations verified. Energy Efficiency M&V policies include:

- Every Energy Efficiency measure and/or program has objective and documented analysis describing kWh and/or therm savings (ref. PSE Measure Metrics database). The Verification Team provides on-site independent checks of measure installations for measures and/or programs.
- Energy Efficiency program planning, implementation, verification and evaluation teams are engaged in on-going quality assurance, quality control, analysis and reporting of measure/program activities.
- All methods are documented and subject to review to increase quality and reliability.

3. Verification Team Guidelines

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

“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.”⁶

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.

⁶ Agreed Conditions for Approval of Puget Sound Energy, Inc.’s 2010-2011 Biennial Electric Conservation Targets under RCW 19.285, Docket No. UE-100177.

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.

E. Program Evaluation

1. Description

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, in accordance with the guiding Evaluation Framework, ensuring that all programs receive review on a four-year cyclic basis. In prioritizing programs for evaluation, PSE also considers the level of energy savings, significant program changes 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.

Residential Programs to be evaluated in 2016-2017 include:

- Low Income Weatherization
- Residential Retrofit
- Residential Retail Channel
- Home Energy Reports
- Residential New Construction

Nonresidential Programs to be evaluated in 2016-2017 include:

- Nonresidential Rebates
- Nonresidential New Construction
- Resource Conservation Manager
- Industrial System Optimization Program
- Small and Medium Business
- Bellevue Urban Smart
- Conservation Voltage Reduction

For additional information on planned evaluation activity, please refer to the Evaluation Plan (Exhibit 6 of the 2016-2017 Biennial Conservation Plan).

Through the Evaluation Report Response (ERR), the Program and Evaluation Teams 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 reactions and adjustments being documented in the Source of Savings database.

PSE frequently shares the results of its evaluations with the RTF to ensure continuous improvement of measure energy savings values that are 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.

VII. OTHER ELECTRIC PROGRAMS

A. Customer Connected Solar

Customers that interconnect a qualifying renewable system—such as solar photovoltaic, small wind, or microhydro—with PSE (“Customer-Generators”) are eligible to participate in PSE’s Net Metering program (terms of the program are outlined in Schedule 150) and in PSE’s Renewable Energy Advantage 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 services for qualifying customer-generators in accordance with State legislation enacted into law in February 11, 1999 and amended June 8, 2000 (see RCW 80.60).

b. Description

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

At the time a customer enrolls in the Net Metering program, they are also provided the necessary information to receive annual benefits from the Production Metering, or Renewable Energy Advantage Program (REAP) , which is the state’s performance based incentive described in Schedule 151.

c. Target Market

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

d. Customer Incentives

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

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

2. Production Metering

Schedule 151

Beginning October 1, 2017, the rates and terms of participating in the program will change substantially for any new customer installing an eligible system.

a. Purpose

PSE's Renewable Energy Advantage Program provides qualifying Customer-generators with production payments in accordance with State legislation SB 6658 as PSE receives tax credits for renewable production payments, as outlined in RCW 82.16.

b. Description

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

c. Target Market

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

d. Customer Incentives

Once a year customers are paid for all power generated up to the \$5,000.00 cap per the State's Renewable Energy Cost Recovery Program. This payment ranges from \$0.12 to \$1.08 per kWh generated per state law.

PSE currently identifies the annual production total and provides the annual application and payment to the customer.

Consistent with WAC requirements enumerated in part 458-20-273(501), PSE must prorate payments to accommodate new customer-generators once the payment cap is reached.

e. Marketing Plan

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

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

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

B. Electric Vehicle Charger Incentive

Schedule 195

The Electric Vehicle Charger Incentive pilot program concluded in the first half of 2017. PSE is conducting analysis of the data collected during the pilot, and will provide a summary to PSE Regulatory Stakeholders when the analysis is completed.

3. Target Market

The program targeted electric vehicle drivers who live in PSE's electric service territory and have their residence as their principle charging location.

4. Customer Incentives

The program offered \$500.00 per charger installed at the customer's residence, which must also be their primary charging location. The program was capped at 5,000 participants.

5. Marketing Plan

Customer purchase electric vehicle charging equipment through automotive dealers, charging equipment manufacturers, installers, and local and national retailers. PSE will market at the point of sale with automotive dealers, and potentially with equipment manufacturers and installers and retailers. PSE will also use online advertising and outreach at electric vehicle related events to inform customers of the program.

C. Demand Response

Schedule E271

1. Background

PSE proceeded with the development of demand response programs throughout 2016 with the goal of meeting the MW targets indicated in the 2015 IRP. PSE issued two RFPs for technology and implementation services in September 2016: Commercial & Industrial Demand Response and Direct Load Control. PSE convened an internal stakeholder group with representation from several departments to score the submitted proposals and interview the vendor finalists.

Concurrently, the PSE demand response team developed a proposed cost-effectiveness methodology for evaluating DR resources. The proposed methodology was applied to the bids from the highest scoring vendors. The results showed that the programs were marginally cost-effective under the proposed methodology.

2. Next Steps

In January 2017, PSE relocated demand response program development and management from its Energy Efficiency unit to its Energy Supply organization. Program development has continued under the new organizational structure. While full-scale programs will not be pursued in 2017 due to marginal cost-effectiveness, the PSE demand response team has continued to develop smaller scale pilot programs for commercial, industrial, and residential customers to be launched in late 2017. PSE will also pursue a stakeholder process with WUTC staff and others to develop consensus and gain approval for a cost-effectiveness methodology for evaluating DR resources.

VIII. 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 Architect
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
CS/EE	Customer Solutions/Energy Efficiency. This was the new name assigned to EES (Energy Efficiency Services) at the beginning of 2012.
DDC	Design Development and Construction
DHW	Domestic Hot Water
Direct Install Measure	A conservation Measure that is installed by a PSE representative—rather than a PSE customer—into a qualifying structure.
ECM	Electronically Commutated Motor

Definitions and Acronyms, continued

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