

Energy Efficiency Services



2012 - 2013 Biennial Conservation Plan



PUGET SOUND ENERGY

The Energy To Do Great Things

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- Exhibit 3: Program details, with target market, marketing plans, customer incentives
- Exhibit 4: EES List of Measures, Incentives and Eligibility
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Executive Summary

PSE is pleased to present this Biennial Conservation Plan (the Plan) for 2012-2013. In the following pages, we outline a variety of new and revised programs, functions, and activities the Company is putting into place to meet our aggressive electric conservation targets and natural gas conservation goals. The Company appreciates the opportunity to collaborate with its Conservation Resource Advisory Group (CRAG) on many of these initiatives.

We've re-kindled a close relationship with the CRAG, establishing a common vision, frequent communication, response to informal queries, and formalized our meeting process. In 2011, PSE and the CRAG met formally seven times. There were also numerous sub-committee meetings comprised of CRAG members, used to discuss program revisions, pilot development, and evaluation projects. PSE has frequently gone beyond compliance requirements¹ to provide an exceptional level of background and details. This Plan was developed with numerous milestones set throughout to assure CRAG review and input in compliance with applicable regulatory requirements. PSE acknowledges, and is very appreciative of the volume and quality of work performed by the CRAG throughout this period.

Table 1 presents the requested budgets needed to acquire conservation and achieve these targets, along with the corresponding natural gas conservation goals and budgets.

Table 1: Overall 2012-2013 EES Targets and Budgets

<u>Two-Year</u>	Electric	Gas	Total Budget
Targets	666,000 MWh, 76.0 aMW	9.55 Million Therms	
Budgets	\$193.4 million	\$26.6 million	\$220 million

Based on the Company's filed 2011 IRP, and definitions enumerated in RCW 19.285.030, and using methods consistent with The Northwest Power and Conservation Council, ("the Council"), PSE's ten-year achievable potential conservation is 3,531,508 MegaWatt-hours, or 403.1 average MegaWatts (aMW). PSE's 2012-2013 (biennial) pro-rata share of the electric ten-year potential is 666,000 MegaWatt-hours (MWh), or 76.0 aMW. These figures are stated in terms of energy savings at the customer meter.

¹ In its quarterly Condition Compliance Checklist, which provides CRAG members with up-to-date status of compliance with conditions outlined in the 2010 Electric Settlement Terms for Conservation in Docket No. UE-100177, PSE clearly indicates those conditions that are completed with their completion date. PSE also maintains a list of action items that arise in its CRAG meetings, email requests and informational queries, tracking their progress as well.

The 2012-2013 natural gas savings target of 9.55 million therms, as measured at the customer meter, was also based upon the potential presented in the Company's 2011 IRP.

For the 2012-2013 period, PSE estimates that, at the portfolio level, the aggregate of electric programs will achieve a Utility Cost benefit-to-cost ratio (UC) of 2.80 and a Total Resource Cost benefit-to-cost ratio (TRC) of 2.05. Gas programs, in aggregate, are estimated to achieve a UC of 2.58 and a TRC of 1.29.

Consistent with condition K(4)(a), the Biennial Conservation Plan includes a 2012-specific conservation target and commensurate budgets. Table 2 presents those portfolio-level summaries.

Table 2: 2012-Specific EES Targets and Budgets

<u>2012 Only</u>	Electric	Gas	Total Budget
Targets	336,700 MWh, 38.4 aMW	4.84 Million Therms	
Budgets	\$98.5 million	\$13.5 million	\$112 million

Several Customer Energy Management programs are enhanced for the upcoming biennium, including those in Residential Energy Management (REM) and Business Energy Management (BEM) sectors.

The Company must overcome some considerable challenges to conservation acquisition efforts for 2012. One notable instance is the reduction of CFL per-unit savings, from an RTF Unit Energy Savings (UES) of 24 kWh to an RTF UES of 16 kWh/year; a reduction of 33 percent. As REM's Retail Lighting delivered approximately 66² percent of the sector's savings in 2011, this is a significant impact. There is a similar effect in the BEM sector, as T-12 fluorescent lamp efficiency requirements become effective in 2012. Additional considerations to achieving the conservation targets include avoided costs and cost effectiveness effects, increases in measure materials costs, the phase-out of ARRA-funded projects, and the adoption of new energy codes.

To offset these influences, the REM sector is placing emphasis on a wider array of appliances, with expanded services included in refrigerator offerings and television replacements. The sector is also expanding the retail lighting offerings to include new LED technologies, and offering Multifamily air sealing for the first time.

² As indicated by the August 2011 YTD figures. REM's total 8/11 YTD savings were 86,666 MWh, while Retail Lighting's (CFLs only) lighting savings were 57,373 MWh.

A new program, Home Energy Reports was given the full support of the CRAG³ near the end of 2011. A pilot program since 2009, the Home Energy Reports program underwent numerous internal and third-party evaluation studies, and CRAG scrutiny. The program is limited to a set number of eligible customers, and will continue to undergo annual evaluation studies.

BEM is increasing the scope of its Commercial/Industrial Retrofit and Business Rebate offerings, by contracting with three new service providers. These innovative programs include Data Center Efficiency, Industrial Systems Optimization, Building Tune-up & Tracking, and the Small Business Direct Install Program.

Included within the electric biennial conservation target are programs associated with conservation initiatives to be pursued in PSE-operated generation and distribution facilities within the State of Washington. This is the first time that these facilities are included in the biennial conservation target, which is outlined as a source of conservation in the Company's 2011 IRP.

The Company's marketing plans are intricately incorporated with each program's specific goals and constituency, tailored for the maximum exposure and conservation delivery.

Program details, cost effectiveness calculations--including two new portfolio-level cost effectiveness tests, prescriptive measure tables, evaluation plans, marketing plans, and EM&V Framework are included as Exhibits to this report. The Company has also made significant improvements to its budget portfolio presentation, Exhibit 1. Several tariff Schedules are cancelled in 2012, with two additions, Schedule 271, Commercial/Industrial Electric Demand Response Programs, and Schedule 292, Distribution and Generation Efficiencies⁴ being added.

The following Biennial Conservation Plan expands on all key components of the 2012-2013 electric and natural gas conservation targets and their associated budgets.

³ CRAG support was conditioned on continuing evaluation development of potential double-counting issues, customer stratification analyses, and ongoing understanding of participant behavior.

⁴ Company owned or operated Production or Distribution Facilities.

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Introduction

The 2012-2013 Biennial Conservation Plan will outline and provide elaboration on the following summary information. This introductory section will provide a summary view of information, descriptions, and details that are provided in the 2012-2013 Conservation Plan section, (starting on page 13) and the attached Exhibits.

It is noteworthy that in previous documents, PSE's Energy Efficiency Services (EES) included a Glossary section at or near the beginning of the document. In response to requests to enhance the ability to quickly access the most pertinent information, we moved the Glossary section to the end of this document.

In addition to the Biennial Conservation Plan, several supporting documents and Exhibits are attached. They are⁵:

- Ten-year Achievable Conservation Potential and Two-year Targets
- Exhibit 1: Order number level budget and savings details
- Exhibit 2: Cost effectiveness tables, including avoided cost and cost effectiveness calculation methodologies
- Exhibit 3: Program details, with target market, marketing plans, and customer incentives descriptions
- Exhibit 4: EES List of Measures, Incentives and Eligibility
- Exhibit 5: Prescriptive Measure Tables
- Exhibit 6: Program Evaluation Plan
- Exhibit 7: Marketing Plan
- *Exhibit 8: EM&V Framework (including all associated Attachments)*
- *Exhibit 9: Condition Compliance Status Report*
- Tariff Updates

Compliance

The 2012-2013 Biennial Conservation Plan (BCP, or Plan) outlines goals, targets, strategies, and operational issues that are consistent with applicable RCWs, WACs, and Commission Orders. It also complies with requirements and conditions specified in the 2010 Electric Settlement Terms, Docket No. UE-100177.

The 2012-2013 BCP is consistent with RCW 19.285, including chapters 19.285.040(1) and its sub-paragraphs, and RCW 80.52.030(7) and (8), which defines cost effectiveness and system costs. WAC 480-07-880(1), 480-109-040(2) and 480-109-010, and Commission Orders in Dockets UE-072375, UE-011750 & UG-011571, and UE-970686.

⁵ Italicized Exhibits are new, added details for this Biennial Conservation Plan.

The BCP is submitted as a WAC required report, as it:

- Identifies PSE's ten-year achievable conservation potential for 2012-2012 and PSE's biennial conservation target for 2012-2013.
- Outlines the extent of public and Commission Staff participation in the development of conservation metrics.
- Identifies whether the Conservation Council's plan or PSE's IRP and acquisition process were the source of its ten-year conservation potential.
- Describes the technologies, data collection processes, procedures, and assumptions PSE used to develop the figures.

The Company maintained a close collaboration with its Conservation Resource Advisory Group (CRAG) throughout the last biennium in complying with the 2010 Electric Settlement requirements and conditions. The CRAG was directly engaged in the development of PSE's conservation targets, budgets, and a wide range of related conservation projects and deliverables. PSE forecasts that all actionable conditions will be completed by the end of year 2011.

Key conditions that are satisfied with the submission of this report include:

- K(8)(f) PSE must provide a report identifying its ten-year achievable potential and its biennial conservation target by November 1, 2011.
- K(4)(b) PSE must provide its proposed budget in a detailed format with a summary page (.....).
- K(4)(a) (...) In odd-numbered years, the annual budget may be submitted as part of the BCP.

Several other conditions, as detailed in the Condition Compliance Checklist, **Exhibit 9**, directly influenced, informed, or related to the development of this BCP and Exhibits.

Throughout this 2012-2013 Biennial Conservation Plan, PSE will reference these and other 2010 Electric Settlement Terms Sections and conditions. In the interest of brevity and avoiding repetition, henceforth, the document will reference "condition K(n)(n)" or "Section N(n)", rather than "Section N(n) of the 2010 Electric Settlement Terms, Docket No. 100177".

Through the upcoming 2012-2013 biennium, PSE plans to abide by the ongoing obligations enumerated in the 2010 Electric Conservation Settlement Terms, with updated requirements noted, starting on page 21.

Ten-year Achievable Conservation Potential and Biennial Conservation Acquisition Targets

The **2012-2021 Ten-year Achievable Conservation Potential and 2012-2013 Biennial Conservation Targets** document, immediately following this Plan, provides detailed discussion on the development of the ten-year achievable conservation potential and two-year conservation target. This document is referenced in various sections of this document; either as “The Ten-year Potential and Two-year Target”, “Two-year Target”, or “2012-2013 Biennial Target”. Each designation has the same meaning for purposes of referencing the Ten-year Achievable Conservation Potential and 2012-2013 Biennial Conservation Targets.

The document outlines applicable RCW and WAC compliance, and contains references to the 2011 PSE Integrated Resource Plan (IRP). A summary is provided in the 2012-2013 Conservation Plan of this document, beginning on page 15.

These conservation targets represent PSE’s total obligation, relative to achieving all available, feasible conservation, under terms of RCW 19.285 and WAC 408-109. After Commission approval of PSE’s biennial acquisition target, that conservation energy target is deemed to be all cost-effective, reliable, feasible, and available conservation that the Company must pursue for the 2012-2013 biennium.

PSE’s ten-year achievable electric conservation target is 3,531,508 MWh, or 403.1aMW and the two-year electric conservation target will be 666,000 MWh, or 76.0 aMW of first-year savings, as measured at the customer meter. The gas 2012-2013 biennial target will be 9.55 million therms.

Sector-Level Budgets and Conservation Targets

For the above-noted conservation acquisition targets, PSE’s corresponding 2012-2013 electric budget is \$193.4 million and the natural gas budget is \$26.6 million. The combined 2012-2013 total is \$220 million.

Table 3 provides sector views of EES’s 2012-2013 targets and budgets.

**Table 3: 2012-2013 EES Conservation Acquisition and Budgets
By Exhibit 1 Grouping**

	Electric MWh	Gas Million Therms
Residential	298,900 <i>\$85.0 Million</i>	3.79 <i>\$14.1 million</i>
Business	312,100 <i>\$80.5 million</i>	5.76 <i>\$10.6 million</i>
NEEA	38,800 <i>\$10.5 million</i>	- -
In-state Production & Distribution	16,200 <i>\$623,000</i>	- -
Portfolio Support	- <i>\$7.1 million</i>	- <i>\$1.1 million</i>
Research & Compliance	- <i>\$5.8 million</i>	- <i>\$1.3 million</i>
Other Electric Programs	- <i>\$3.8 million</i>	- -
Total 2012-2013	666,000 MWh, 76.0 aMW <i>\$193.4 million</i>	9.55 million <i>\$26.6 million</i>
\$220 million		

Portfolio, Sector and Program-level budget and savings details for all gas and electric programs, and portfolio support activities and functions are contained in Exhibit 1.

Consistent with condition K(4)(a), Exhibit 1 contains a 2012-specific annual budget and conservation target view. These are summarized at a sector level in Table 4. Detailed 2012-specific information is contained at a program level within the Exhibit 1 workbook.

**Table 4: 2012-Specific EES Conservation Acquisition and Budgets
By Exhibit 1 Grouping**

	Electric MWh	Gas Million Therms
Residential	149,300 <i>\$42.7 Million</i>	1.85 <i>\$6.9 million</i>
Business	159,900 <i>\$41.9 million</i>	2.99 <i>\$5.3 million</i>
NEEA	19,400 <i>\$5.3 million</i>	- -
In-state Production & Distribution	8,100 <i>\$312,000</i>	- -
Portfolio Support	- <i>\$3.5 million</i>	- <i>\$538,000</i>
Research & Compliance	- <i>\$3.2 million</i>	- <i>\$638,000</i>
Other Electric Programs	- <i>\$1.6 million</i>	- -
Total 2012-2013	336,700 MWh, 38.4 aMW <i>\$98.5 million</i>	4.84 million <i>\$13.4 million</i>
	\$112 million	

2012-2013 Cost Effectiveness

Table 5 provides PSE estimates of the portfolio-level cost effectiveness of its electric and gas programs. Two new tests are added, consistent with condition K(10)(b). These are (1) the Ratepayer Impact Measure (RIM) and (2) Participant Cost Test (PCT). Cost effectiveness estimates for gas and electric programs, in addition to detailed explanations of the avoided costs and cost-effectiveness calculations methodologies are provided in **Exhibit 2**.

Table 5: 2012-2013 EES Portfolio Cost Effectiveness Estimates

	UC	TRC	RIM	PCT
Electric	2.80	2.05	1.42	3.08
Gas	2.58	1.29	1.91	1.05

EES Program Plans

Sector-level strategic and tactical plans are listed in the EES 2012-2013 Conservation Plans section, beginning on page 35. Program Details, for all conservation programs in the Customer Energy Management (CEM) department, Portfolio Support, Research & Compliance, and Other Electric Programs, are provided in **Exhibit 3**.

EES Measures

Exhibit 4 provides, by program and by fuel type, all incentives EES will offer as of January 1, 2012. Beginning in 2011, PSE updated Exhibit 4 each quarter by filing a replacement copy with the WUTC. PSE also provides the CRAG a mark-up version and a “clean” copy of Exhibit 4. In addition, to provide additional measure revision details, the CRAG receives a comprehensive table that illustrates the specific element of the measure being revised; the incentive amount, savings value, or delivery method changes, and its corresponding business case for the revision. Starting in 2012, PSE will file replacement pages with the WUTC Records Center as needed, rather than on a strict quarterly basis. This way, a potential programmatic revision will not need to wait for a set filing date. The version included with this filing contains no mark-ups.

A new document, **Exhibit 5**, provides tables that list savings values, and the source of those values, of both Residential and Business Rebates measures planned for 2012-2013.

Evaluation Plan

A summary of the EES evaluation plan is contained in the Program Plans section on page 51. The complete Evaluation Plan is presented in **Exhibit 5**.

Marketing Plan

The EES Marketing Plan summaries are included at the end of the Residential Energy Management and Business Energy Management sections of Exhibit 3. Additionally, detailed marketing initiatives at the program level are presented in **Exhibit 7**.

EM&V Framework

Exhibit 8 is the EES EM&V Framework, developed in collaboration with a sub-committee of the CRAG. Inclusion of the EM&V Framework in this Biennial Conservation Plan is consistent with condition K(3)(a)(i)(1). The Framework also includes several Attachments, which are internal EES Operational Guidelines, processes, and procedures.

Tariff Revisions

Revised Tariff Sheet Schedules are included in an unnamed Exhibit for reference. Tariff updates will be filed with the WUTC in a similarly timed filing, formatted according to RCW 80.28.040 & 050, and WAC 480-80. Following approval or acceptance by the Washington state Utilities and Transportation Commission, and made effective on January 1, 2012, they will be posted on PSE.com as separate documents. It is important to note that only those Tariff Sheets being revised are filed, rather than the entire Schedule or complete set of Conservation Schedules.

It is PSE's standard practice to post all reporting and plan Exhibits and Appendices on the PSE.com website under the Conservation Schedules listing. The Tariff Sheet revisions set of documents is referred to as an "Unnamed Exhibit ", so that when the tariff sheets are approved, it will not be necessary to list them separately as an Exhibit; they will be posted in their respective categories in the PSE website.

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PSE's 2012-2013 Biennial Conservation Plan Details

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Compliance

In the 2012-2013 biennium, PSE will continue its unaltered trend of meeting or exceeding electric and gas conservation targets since 2002, when the Company's conservation targets were 9 aMW and 700,000 therms. Throughout that time, numerous audits, reviews, and investigations, including on-site visits from WUTC Staff and other stakeholders, independent auditors⁶, and the PSE Internal Audit department, have found that the Company's Energy Efficiency Services (EES) Department is routinely in complete compliance with laws and requirements. In nine years, no audit findings were recorded during these reviews.

With the implementation of the 2002 General Rate Case (GRC) Stipulation Agreement, Docket Nos. UE-110570 and UG-110571, governing both electric and gas conservation efforts, PSE established its Conservation Resource Advisory Group (CRAG), with which it has maintained a long-standing engagement, ranging from conservation target setting, budget reviews, tariff filing reviews, routine reporting, field trips to various conservation projects, and involvement with policy setting.

PSE's 2002 Stipulation Agreement was used as the foundation for establishing its current 2010 Electric Conservation Settlement Terms, Docket No. UE-100177, and those of other Washington utilities. Obligations are consistent with those that PSE has abided by since 2002, including the natural gas requirements not outlined in the 2010 Electric Conservation Settlement Terms.

Notable additions, such as a requirement to document an EM&V Framework and protocols, created the opportunity for PSE to present to stakeholders several processes and policies under which PSE has successfully operated for a number of years prior to the passage of I-937, the Energy Independence Act (EIA), and implementation of RCW 19.285. One-time exceptions, particularly condition K(6)(g), provided a new opportunity for PSE to validate the veracity of its 2010 and 2011 electric savings claims.

Consistent with the strategy implemented to use the 2010 Settlement Terms and conditions to assist in the development of this 2012-2013 Biennial Conservation Plan, PSE will continue to operate in compliance with the ongoing obligations as contained in the condition table presented in **Exhibit 9** to inform the development of the Company's 2014-2015 Biennial Conservation Plan.

⁶ During the years in which PSE participated in the BPA's C&RD and CRC programs, Ernst & Young conducted two comprehensive audits of those programs, with no audit findings.

Applicable Compliance with Laws, Rules and Settlement

The 2012-2013 Biennial Conservation Plan outlines goals, targets, strategies, and operational issues that are consistent with applicable RCWs and WACs. Specifically:

RCW	Chapter Description	Referenced in 2010 Electric Settlement Terms
19.285.040(1)	Each qualifying utility shall pursue all available conservation that is cost-effective, reliable, and feasible.	A(3): Executing parties, former settlement terms
19.285.040(1)		F(11): Program Budgets are determined by conservation targets set under terms of the RCW.
19.285.040(1)(b)	(...Utilities) shall make public a biennial acquisition target....and meet that target during the subsequent two-year period.	K(8)(f): A biennial report identifying PSE's ten-year potential and 2012-2013 electric conservation target
19.285.040(1)(e)	The commission may rely on its standard practice for review and approval of investor-owned utility conservation targets.	K(1): Parties recommend that PSE's (2010-2011) target be approved
19.285 (overall)		K(2): Company retains responsibility
19.285.040(1)(a)each utility will identify its achievable...conservation potential	K(3)(a)(ii): Development of...conservation potential
19.285.040(1)(d)	The commission may determine if a conservation program implemented by an investor-owned utility is cost-effective based on the commission's policies and practices. Also--REC 80.52.030, which provides cost-effective outlines	K(8)(a) (and K(8)(e)):The commission is not obligated to accept savings identified in the Revised Report.
80.52.030(7) and (8)	Cost effectiveness and system cost definitions	K(10)(a): TRC is the primary cost effectiveness test

After Commission approval of PSE's biennial acquisition target, that conservation energy target is deemed to be all cost-effective, reliable, feasible, and available conservation that the Company must pursue for the 2012-2013 biennium, as noted in RCW 19.285.010(1)(b):

Beginning January 2010, each qualifying utility shall establish and make publicly available a biennial acquisition target for cost-effective conservation consistent with its identification of achievable opportunities in (a) of this subsection, and meet that target during the subsequent two-year period. At a minimum, each biennial target must be no lower than the qualifying utility's pro rata share for that two-year period of its cost-effective conservation potential for the subsequent ten-year period.

WAC	Title	Referenced in 2010 Electric Settlement Terms
480-109-040(2) (indirect reference)	(Part c) upon consultation of the commission review of the utility's report, the commission will issue a decision determining whether the utility complied with its conservation and renewable resources target.	I(18)(c): (The report card) be distributed no less than 90 days after the Commission determination on the two-year report on conservation program achievement....
480-109-010	By January 1, 2010, and every two years thereafter, each utility must project is cumulative ten-year conservation potential.	K(9)(b): PSE must consult wit the Advisory Groups between April 1, 2011 and October 31, 2011 to identify achievable conservation potential.....

Commission orders in Docket No.	Title	Referenced in 2010 Electric Settlement Terms
U-072375	Section: Commitments, Nos 22 & 23	G(14): PSE will continue existing low income programs
UE-011570 UG-011571	Establishment of a formal advisory group	K(3): PSE must maintain and use an external conservation Advisory Group
UE-970686	Deferral of expenditures; implementation of a tariff rider, rates set forth in Schedule 120	K(11)(c): Cost recovery for each customer class

WAC Rules

With regard to the establishment of its ten-year potential and achievable two-year conservation target, this plan is consistent with and meets all applicable WACs, and is submitted as a WAC-required report. The 2012-2013 Biennial Conservation Plan (BCP):

1. Identifies PSE's ten-year achievable conservation potential for the period 2012-2021 and PSE's biennial conservation target for the period 2010-2011 pursuant to WAC 480-109-010(3). The report is submitted as a compliance filing pursuant to WAC 480-07-880(1).

2. Meets the requirements of WAC 180-109-010(3)(a), which states: “[t]he report must outline the extent of public and commission staff participation in the development of these conservation metrics.”
3. Meets the requirements of WAC 480-109-010(3)(b), which states: “This report must identify whether the conservation council’s plan or the utility’s IRP and acquisition process were the source of its ten-year conservation potential.” and “[t]he report must also clearly state how the utility prorated this ten-year projection to create its two-year conservation target.”
4. Meets the requirements of WAC 480-109-010(3)(c), which states: “If the utility uses its integrated resource plan and related information to determine its ten-year conservation potential, the report must describe the technologies, data collection, processes, procedures and assumptions the utility used to develop these figures. This report must describe and support any changes in assumptions or methodologies used in the utilities most recent IRP...”

Deliverables that meet the above noted compliance requirements are summarized in the Conservation Plan section and detailed in the **2012-2021 Ten-year Achievable Conservation Potential and 2012-2013 Biennial Conservation Targets** document of this 2012-2013 Biennial Conservation Plan.

2010 Electric Settlement Terms

Throughout 2011, PSE provided the CRAG with regular updates as to its progress in meeting the obligations of the 2010 Settlement Terms for Conservation in Docket No. UE-100177. The final 2011 status⁷ of PSE’s compliance is attached to this Plan as **Exhibit 9**. The Company’s 2012-2013 Biennial Conservation Plan was informed, in part, on the results of the terms and conditions within the Settlement Agreement, and will continue its compliance and regular CRAG updates and engagement throughout the course of the 2012-2013 biennium. This Plan is also submitted as compliance with the Commission’s Final Order in Docket No. UE-100177 (“Final Order”).

Specific Settlement Terms and conditions addressed in this Biennial Conservation Plan include conditions K(4)(b) and K(8)(f):

K(8)(f) – (PSE must provide the following:)

A report identifying its ten-year achievable potential and its biennial conservation target (Biennial Conservation Plan), including revised program details and program tariffs by November 1, 2011, requesting an effective date of January 1, 2012. In addition to the usual customer-based measures, the plan will also include both distribution and generation energy efficiency program plans as required by RCW 19.285.

⁷ Although filed by November 1, 2011, the checklist in Exhibit 9 reflects planned year-end status.

Prior to filing the Biennial Conservation Plan, PSE shall provide the following information to the CRAG: ten-year conservation potential and two-year target by August 1, 2011; draft program details, including budgets, by September 1, 2011; and draft program tariffs by October 1, 2011.

Exhibit 1 provides extensive program budget details, consistent with condition K(4)(b):

K(4)(b) – PSE must provide its proposed budget in a detailed format with a summary page indicating the proposed budget and savings levels for each electric conservation program, and subsequent supporting spreadsheets providing further detail for each program and line item shown in the summary sheet.

Additionally, Exhibit 1 includes a “2012 Only” view, which satisfies condition K(4)(a):

K(4)(a) (...) In odd-numbered years, the annual budget may be submitted as part of the Biennial Conservation Plan required under Paragraph 8(f) below. (...)

Consistent with condition K(3)(a)(i)(1), PSE’s EM&V Framework is attached, along with its own Attachments, consisting of EES operational protocols, processes and guidelines.

K(3)(a)(i)(1) – Development of a written framework for evaluation, measurement, and verification (EM&V) as implemented by PSE which guides its approach to evaluation, measurement, and verification of energy savings. This framework must be reflected in the Biennial Conservation Plan for the next biennium, 2012-2013
(.....)

This 2012 - 2013 Biennial Conservation Plan also addresses, completes, or initiates compliance with other Settlement Terms conditions:

F(11) – Program Budget
 K(3)(a)(v) – Involve the CRAG with Tariff modifications
 K(3)(a)(vi)(1) – Involve the CRAG with Marketing
 K(3)(a)(vi)(2) – Involve the CRAG with Incentive-setting
 K(3)(a)(ix) – Budget Review with the CRAG
 K(5) – Program Details
 K(7) – Program Design Principles

As noted in Figure 1, PSE developed this 2012-2013 Biennial Conservation Plan in collaboration with the CRAG, going back to the latter part of 2010, and throughout 2011. In addition to seven face-to-face CRAG meetings, several CRAG-related subcommittee meetings occurred in 2011. These included EM&V Framework development, Third-party review RFP evaluations, and program-specific projects.

Various EES managers corresponded with CRAG members throughout 2011 at a rate of more than once per week⁸. PSE acknowledges, and is very appreciative of the volume and quality of work performed by the CRAG throughout this period.

PSE plans to abide by the ongoing obligations of the 2010 Electric Settlement Terms in the coming 2012-2013 biennium. Several conditions enumerated in Section K have deliverable dates in 2012, including K(6)(g), the one-time Third-party Electric Savings Review, which terminates after the final report is delivered in June, 2012. These are noted in the Figure 1 column, "2012 (date-specific deliverables only)".

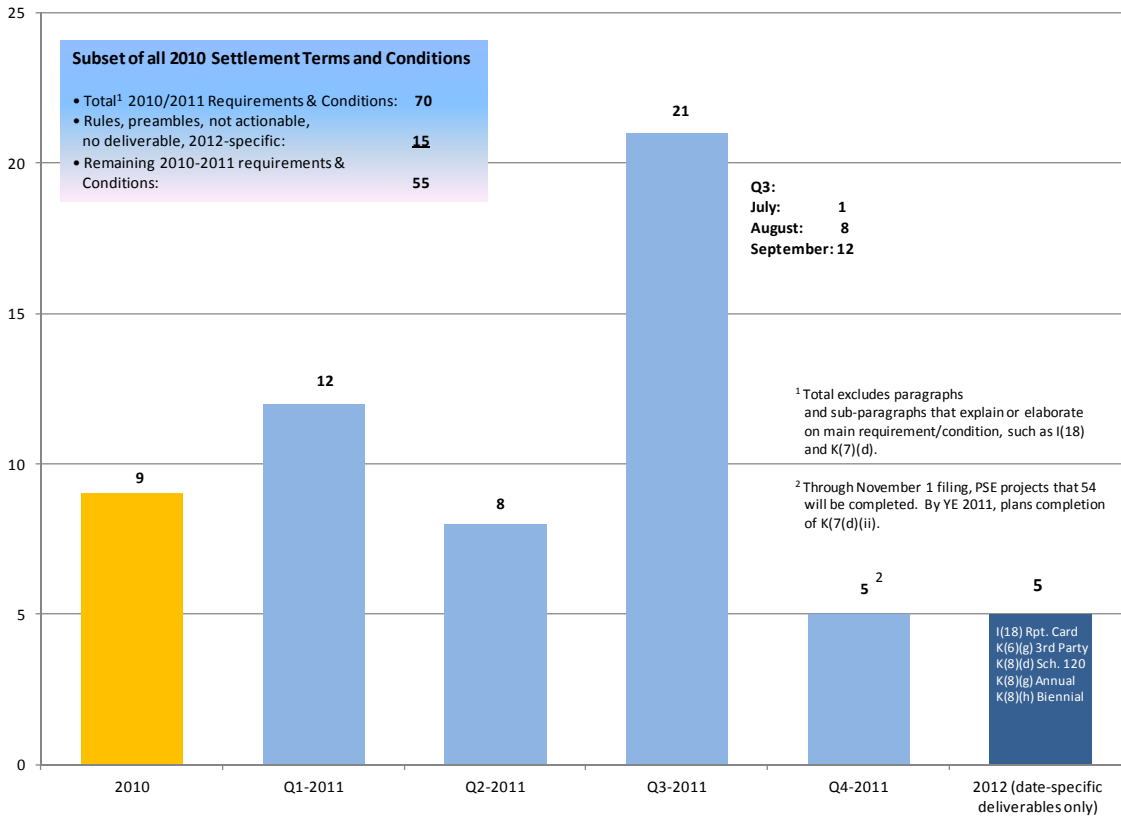
PSE understands that, in order to comply with Section B(4) of the Electric Settlement Agreement, stipulating that there is no agreement sunset date, several new deliverable dates will be implemented in 2012-2013. Table 6 reflects PSE's understanding of these dates.

⁸ For instance, the Compliance Team provided CRAG members with more than 30 emails, including meeting invitations, reports, meeting summaries, responses to questions, etc. Additionally, managers within the Customer Energy Management department routinely corresponded with CRAG members on program-specific issues and questions.

Table 6: Key Condition Deliverable Dates

Requirement	Summary	Current Date(s)	Understood Date(s)
K(8)(a)	First-year Semi-annual report	August 15, 2011	August 15, 2012
K(8)(b)	Second year Annual Conservation Plan	December 1, 2010 January 1, 2011 November 1, 2010	December 1, 2012 January 1, 2013 November 1, 2012
K(8)(c)	First year Annual report	February 15, 2011	February 15, 2013
K(8)(d)	Cost recovery tariff filing (Schedule 120)	March 1, 2011 May 1, 2011	March 1, 2012 May 1, 2012
K(8)(e)	Second year Semi-annual report	August 15, 2011	August 15, 2013
K(8)(f)	Biennial Conservation Plan	November 1, 2011: file complete plan January 1, 2012: Programs effective August 1, 2011: 10-year/2-year draft targets September 1, 2011: draft budgets & program details October 1, 2011: draft tariff changes	November 1, 2013: file complete plan January 1, 2014: Programs effective August 1, 2013: 10-year/2-year draft targets September 1, 2013: draft budgets & program details October 1, 2013: draft tariff changes
K(8)(g)	Second year Annual report	February 15, 2012	February 15, 2014
K(8)(h)	Two-year conservation report	June 1, 2012	June 1, 2014

Figure 1: 2010-2011 Condition Compliance by Quarter



Electric Ten-year Achievable Conservation Potential and Biennial Targets

As noted in the above Compliance section, after Commission approval of PSE's biennial acquisition target, that conservation energy target is deemed to be all cost-effective, reliable, feasible, and available conservation that it must pursue for the 2012-2013 biennium. These conservation targets represent PSE's total obligation, relative to achieving all available, feasible conservation, under terms of RCW 19.285 and WAC 408-109.

The Company's ten-year conservation potential is based on the 2011's Integrated Resource Plan (IRP) analyses of optimized level of energy use and distribution system conservation potential selected by PSE's resource portfolio model. It accounts for time to ramp savings achievement. The conservation potential that is technically available, cost-effective, and achievable includes the 2011 IRP potential plus production and distribution facility efficiencies.

The conservation potential determination was consistent with the Council's methodology, used to develop the 6th Northwest Power Plan. The conservation potential was built with a bottom-up approach, using individual energy-efficient technologies applied to appropriate end uses and building types to determine technical, economic, achievable potential.

Key elements of PSE's analyses include Technical Potential, Economic Potential and Achievable Potential.

Assessment of the conservation potential at PSE electric production facilities as conducted separately from the 2011 IRP and included all hydro and thermal plants operated by PSE in the state of Washington.

Based on analysis described in the **Ten-year Conservation Potential and Two-year Savings Targets** document, PSE's total ten-year cumulative conservation potential, in terms of energy savings at the customer meter is 3,531,508 MWh, or 403.1 aMW.

Not all potential represented in Figure 4 of the **Ten-year Conservation Potential and Two-year Savings Targets** document is realistically feasible to achieve through PSE-funded conservation programs. The potential includes electricity savings from all possible sources: utility programs, codes and standards, market transformation, and adoption of conservation measures outside of any programs or code requirements. There are also market feasibility and uncertainty factors affecting program design and implementation.

Therefore, in order to determine the two-year pro-rata share of the ten-year potential, as required by RCW 19.285.040 and WAC 480-109-007 and 480-109-010, PSE made adjustments to the cumulative conservation potential. These adjustments take into account End Use Efficiency, Production Efficiency from PSE Generation Facilities and Distribution System Efficiency factors. These adjustments result in a 2012-2013 electric conservation target of 666,000 MWh, or 76.0 aMW at the customer meter level.

This target represents 18 percent of the total ten-year conservation potential. This target represents the company's pro rata share of all conservation potential available over ten years that is reliable, cost-effective, and feasible to achieve through its program efforts in the next two years.

PSE's 2012-2013 biennial natural gas conservation target was also developed through the IRP planning process, and is set at 9.55 million therms of first-year savings, as measured at the customer meter.

Consistent with applicable requirements and condition K(3)(d), the Company made public all IRP development meetings and engaged the Conservation Resource Advisory Group (CRAG) throughout the process. The CRAG was apprised of the calculation methodologies and conclusions in the July 21, 2011 CRAG meeting. Additional background and reiteration of calculations and methodologies were presented in the September 29 CRAG meeting.

Four IRP Advisory Group (IRPAG) meetings were held in 2010, and three were held in 2011. Meeting dates were:

2010	2011
April 20	January 13
July 22	March 15
October 7	April 19
November 18	

A complete review of public and Advisory Group participation in the IRP develop is contained in Appendix A of the 2011 IRP.

2012-2013 Conservation Targets

Table 7 provides sector-level views of the above noted savings targets for both electric and natural gas.

Table 7: 2012-2013 EES Conservation Acquisition Targets

	Electric MWh	Gas Million Therms
Residential	298,900	3.79
Business	312,100	5.76
NEEA	38,800	-
In-State Production & Distribution	16,200	-
Total 2012-2013	666,000, <i>76.0 aMW</i>	9.55 Million

2012-2013 Budgets

Table 8 presents the 2012-2013 biennial EES portfolio view of electric and gas expected expenditures in addition to the conservation targets. A full-page view and all details are presented in **Exhibit 1**.

Table 8: 2012-2013 EES Conservation Targets and Budgets by Program

Schedule Nos.	Program Name	2012 view	MWH Savings	Electric Rider Budget	Therm Savings	Gas Tracker Budget	Total Tariff Budget
Residential Energy Management							
E201	G203	Low Income Weatherization	3,900	\$ 5,374,000	78,000	\$ 1,121,000	\$ 6,495,000
E214	G214	Single Family Existing (Subtotal)	251,200	\$ 60,819,000	3,498,600	\$ 10,980,000	\$ 71,799,000
		Residential lighting	143,100	\$ 25,281,000		\$	\$ 25,281,000
		Space heat	12,000	\$ 5,351,000	1,490,600	\$ 4,258,000	\$ 9,609,000
		Water heat	1,700	\$ 639,000		\$	\$ 639,000
		HomePrint	8,100	\$ 3,591,000		\$	\$ 3,591,000
		Home Appliances	51,700	\$ 16,479,000	79,800	\$	\$ 16,479,000
		Showerheads	3,100	\$ 392,000	145,000	\$ 452,000	\$ 844,000
		Weatherization	20,500	\$ 8,655,000	1,089,800	\$ 6,074,000	\$ 14,729,000
		Home Energy Reports	11,000	\$ 431,000	693,400	\$ 196,000	\$ 627,000
E215	G215	Single Family New Construction	3,100	\$ 2,232,000	63,800	\$ 479,000	\$ 2,711,000
E216		Fuel Conversion	5,200	\$ 1,642,000		\$	\$ 1,642,000
E217	G217	Multi Family Existing	33,600	\$ 13,708,000	49,900	\$ 455,000	\$ 14,163,000
E218	G218	Multi Family New Construction	1,900	\$ 1,278,000	100,300	\$ 666,000	\$ 1,944,000
E249	G249	Pilots	0	\$		\$	\$
Total, Residential Programs			298,900	\$ 85,053,000	3,790,600	\$ 13,701,000	\$ 98,754,000
Business Energy Management							
E250	G205	Commercial / Industrial Retrofit	138,300	\$ 39,102,000	952,000	\$ 5,845,000	\$ 44,947,000
E251	G251	Commercial/Industrial New Construction	7,000	\$ 4,428,000	200,000	\$ 1,219,000	\$ 5,647,000
E253	G208	Resource Conservation Manager	38,800	\$ 3,933,000	1,800,000	\$ 2,133,000	\$ 6,066,000
E255		Small Business Lighting Rebate	40,100	\$ 12,891,000		\$	\$ 12,891,000
E258		Large Power User - Self Directed Program	33,000	\$ 10,337,000		\$	\$ 10,337,000
E261	G261	Energy Efficient Technology Evaluation		\$ 60,000		\$ 55,000	\$ 115,000
E262	G262	Commercial Rebates	54,900	\$ 9,760,000	2,806,000	\$ 1,312,000	\$ 11,072,000
Subtotal, Business Programs			312,100	\$ 80,511,000	5,758,000	\$ 10,564,000	\$ 91,075,000
Regional Efficiency Programs							
E254		NW Energy Efficiency Alliance	38,800	\$ 10,521,000		\$	\$ 10,521,000
		Generation, Transmission, and Distribution	16,200	\$ 623,000		\$	\$ 623,000
Subtotal, Regional Programs			55,000	\$ 11,144,000		\$ -	\$ 11,144,000
EES Portfolio Support							
		Customer Engagement and Education		\$ 3,285,000		\$ 489,000	\$ 3,774,000
		Energy Advisors		\$ 2,074,000		\$ 310,000	\$ 2,384,000
		Events		\$ 841,000		\$ 125,000	\$ 966,000
		Brochures		\$ 109,000		\$ 16,000	\$ 125,000
		Education		\$ 261,000		\$ 38,000	\$ 299,000
		Web Experience		\$ 1,969,000		\$ 296,000	\$ 2,265,000
		Mainstreaming Green (Subtotal)		\$ 1,268,000		\$ 191,000	\$ 1,459,000
		Web Development		\$ 256,000		\$ 38,000	\$ 294,000
		Web content maintenance + analytics		\$ 513,000		\$ 77,000	\$ 590,000
		Online customer tools		\$ 470,000		\$ 70,000	\$ 540,000
		E-news		\$ 19,000		\$ 4,000	\$ 23,000
		Miscellaneous applications		\$ 10,000		\$ 2,000	\$ 12,000
		EES Market Integration		\$ 701,000		\$ 105,000	\$ 806,000
		Energy Efficient Communities		\$ 577,000		\$ 86,000	\$ 663,000
		Trade Ally Support		\$ 93,000		\$ 36,000	\$ 129,000
		Marketing Research		\$ 1,226,000		\$ 183,000	\$ 1,409,000
Subtotal, Portfolio Support				\$ 7,150,000		\$ 1,090,000	\$ 8,240,000
EES Research & Compliance							
		Conservation Supply Curves		\$ 670,000		\$ 100,000	\$ 770,000
		Strategic Planning		\$ 594,000		\$ 89,000	\$ 683,000
		Program Evaluation		\$ 3,776,000		\$ 949,000	\$ 4,725,000
		Program Support		\$ 764,000		\$ 123,000	\$ 887,000
Subtotal, Research & Compliance				\$ 5,804,000		\$ 1,261,000	\$ 7,065,000
Total, Efficiency Programs Included in CE Calculations			666,000	\$ 189,662,000	9,548,600	\$ 26,616,000	\$ 216,278,000
Other Electric Programs							
E150		Net Metering		\$ 676,000		\$	\$ 676,000
E248		Renewables Education		\$ 258,000		\$	\$ 258,000
E271		C/I Load Control		\$ 2,756,000		\$	\$ 2,756,000
E249a		Residential Demand Response Pilot		\$ 77,000		\$	\$ 77,000
Subtotal, Other Electric Programs				\$ 3,767,000		\$ -	\$ 3,767,000
GRAND TOTAL All EES Programs			76.0 aMW	\$ 193,429,000	9,548,600	\$ 26,616,000	\$ 220,045,000

BLUE print represents a former Support Activity budget amount.

Please note that Schedules E200, G202, E206, G207, E/G260 and E/G270 are retired in 2012.

2010-2011 original filing:	71.0 aMW	\$ 166,810,000	9,054,000	\$ 33,350,000	\$200,160,000
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Blue cells = use for 10% "info-only" calculation:	3.8%	4.3%
HER program costs excluded from "info-only" calculation because savings will be measured.		

Purple cells = use for 1 - 3% eval calculation:	2.3%	3.9%
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Detailed Budget Breakdowns by Sector

Tables 9 and 10 provide, by cost element group, program budgets for electric and gas fuel types, respectively. Cost element groups are defined in Exhibit 1.

Table 9: 2012-2013 EES Electric Budgets by Cost Element Group

Schedule	Description	Order Number (Click on the order# below to link to the detail page)	Labor	Marketing Labor	Overhead	Marketing	Employee Expense	Outside Services	Materials	Miscellaneous	DBtC	Revenue	Total Budget
Residential Energy Management													
E201	Low Income Weatherization TE	18230611	\$ 287,956	\$ 32,076	\$ 206,890	\$ 8,000	\$ 24,000	\$ 38,400	\$ 21,600	\$ 1,554	\$ 4,753,836	\$ -	\$ 5,374,311
E214	HomePrint - Electric	18230625	\$ 394,924	\$ 72,900	\$ 294,729	\$ 132,000	\$ 32,400	\$ -	\$ -	\$ 80,000	\$ 2,584,000	\$ -	\$ 3,590,954
E214	SF Existing Water Heat - Electric	18230626	\$ 60,649	\$ 18,225	\$ 49,691	\$ 40,000	\$ 2,400	\$ 8,000	\$ 10,000	\$ 4,800	\$ 444,780	\$ -	\$ 638,545
E214	SF Existing Wx - Electric	18230627	\$ 310,298	\$ 36,450	\$ 218,451	\$ 96,000	\$ 7,080	\$ 3,085,250	\$ 6,000	\$ 10,000	\$ 4,885,962	\$ -	\$ 8,655,491
E214	SF Existing Space Heat - Electric	18230628	\$ 349,790	\$ 78,975	\$ 270,122	\$ 240,000	\$ 14,400	\$ 56,000	\$ 34,400	\$ 56,400	\$ 4,251,250	\$ -	\$ 5,351,337
E214	Refrigerator Replacement Program	18230409	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E214	Home Appliances	18230432	\$ 451,342	\$ 127,575	\$ 364,718	\$ 1,105,000	\$ -	\$ 1,725,000	\$ 36,000	\$ 20,000	\$ 12,649,690	\$ -	\$ 16,479,325
E214	Residential Showerheads Elect	18230435	\$ 33,851	\$ 24,300	\$ 36,635	\$ 60,000	\$ 3,000	\$ 62,064	\$ 1,000	\$ 1,000	\$ 170,640	\$ -	\$ 392,490
E214	Energy Efficient Lighting Services	18230440	\$ 541,444	\$ 127,575	\$ 421,482	\$ 2,477,500	\$ -	\$ 1,733,600	\$ 15,000	\$ 72,000	\$ 19,892,313	\$ -	\$ 25,280,913
E215	Single Family New Construction - Electric	18230405	\$ 289,423	\$ 126,968	\$ 262,326	\$ 108,380	\$ 12,000	\$ 285,448	\$ 4,000	\$ 10,000	\$ 1,034,100	\$ -	\$ 2,132,645
E215	Energy Star Manufactured Home Elect	18230433	\$ 17,986	\$ 8,000	\$ 16,371	\$ 7,010	\$ 1,600	\$ -	\$ -	\$ -	\$ 48,000	\$ -	\$ 98,967
E216	Fuel Conversion Rebate	18230612	\$ 163,611	\$ 60,750	\$ 141,348	\$ 112,000	\$ 2,400	\$ 2,000	\$ 2,000	\$ 4,000	\$ 1,153,500	\$ -	\$ 1,641,609
E217	Multi-Family Retrofit Elect	18230407	\$ 733,205	\$ 167,670	\$ 567,551	\$ 135,000	\$ 19,040	\$ 1,705,449	\$ -	\$ 19,240	\$ 10,360,610	\$ -	\$ 13,707,765
E218	Multi-Family New Construction Elect	18230486	\$ 308,404	\$ 30,160	\$ 213,295	\$ 67,500	\$ 4,680	\$ 400	\$ 200	\$ 10,480	\$ 642,739	\$ -	\$ 1,277,858
E249	SF Existing Pilots - Electric	18230629	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E249	Home Energy Reports E	18230461	\$ 39,492	\$ 12,150	\$ 32,535	\$ -	\$ -	\$ 346,724	\$ -	\$ -	\$ -	\$ -	\$ 430,901
Total, Residential Energy Management			\$ 3,982,375	\$ 923,774	\$ 3,096,143	\$ 4,588,390	\$ 123,000	\$ 9,048,335	\$ 130,200	\$ 289,474	\$ 62,871,419	\$ -	\$ 85,053,110
Business Energy Management													
E250	Commercial/Industrial Retrofit	18230711	\$ 2,845,900	\$ 65,600	\$ 1,834,200	\$ 42,000	\$ 123,600	\$ 4,745,400	\$ 21,300	\$ 4,800	\$ 29,419,200	\$ -	\$ 39,102,000
E251	Commercial/Industrial New Construction	18230715	\$ 450,000	\$ 38,800	\$ 308,000	\$ 21,000	\$ 8,000	\$ 100,500	\$ 940	\$ 1,000	\$ 3,500,000	\$ -	\$ 4,428,240
E253	Resource Conservation Manager	18230723	\$ 770,600	\$ 38,800	\$ 510,000	\$ 17,500	\$ 31,000	\$ 827,200	\$ 38,700	\$ 4,000	\$ 1,695,300	\$ -	\$ 3,933,100
E255	Small Business Lighting	18230725	\$ 987,800	\$ 38,800	\$ 646,800	\$ 25,000	\$ 20,400	\$ 136,500	\$ 6,760	\$ 1,000	\$ 11,027,500	\$ -	\$ 12,890,560
E257	LED Traffic Signals (RETIRED)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E258	High Voltage, Self-Directed	18230729	\$ 673,100	\$ -	\$ 424,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,240,000	\$ -	\$ 10,337,100
E261	Technology Evaluation	18230448	\$ 9,000	\$ -	\$ 5,600	\$ -	\$ -	\$ -	\$ 40,000	\$ 5,800	\$ -	\$ -	\$ 60,400
E262	Business Rebates	18230449	\$ 962,200	\$ 80,200	\$ 656,800	\$ 108,000	\$ 22,800	\$ 1,023,600	\$ 17,360	\$ 3,000	\$ 6,886,000	\$ -	\$ 9,759,960
Total, Business Energy Management			\$ 6,698,600	\$ 262,200	\$ 4,385,400	\$ 213,500	\$ 205,800	\$ 6,833,200	\$ 125,060	\$ 19,600	\$ 61,768,000	\$ -	\$ 80,511,360
Regional Efficiency Programs													
E254	Northwest Energy Efficiency Alliance	18230421	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,521,280	\$ -	\$ -	\$ -	\$ -	\$ 10,521,280
	Transmission & Distribution	TBD	\$ 382,200	\$ -	\$ 240,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 623,000
Total, Regional Efficiency Programs			\$ 382,200	\$ -	\$ 240,800	\$ -	\$ -	\$ 10,521,280	\$ -	\$ -	\$ -	\$ -	\$ 11,144,280
Portfolio Support													
(Title pg)	Customer Engagement & Education												
	Energy Advisors	18230610	\$ 1,204,279	\$ -	\$ 758,696	\$ -	\$ 58,291	\$ 42,108	\$ 10,440	\$ -	\$ -	\$ -	\$ 2,073,815
	Events	18230602	\$ 347,335	\$ -	\$ 218,821	\$ 22,650	\$ 4,891	\$ 224,238	\$ 15,208	\$ 7,740	\$ -	\$ -	\$ 840,883
	Brochures	18230482	\$ -	\$ -	\$ -	\$ 54,560	\$ -	\$ 4,350	\$ 49,590	\$ -	\$ -	\$ -	\$ 108,500
	Education	18230621	\$ 110,558	\$ -	\$ 69,651	\$ -	\$ 1,680	\$ 61,300	\$ 17,800	\$ -	\$ -	\$ -	\$ 260,989
(Title pg)	Web Experience												
	Mainstreaming Green	18230408	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,268,420	\$ -	\$ -	\$ -	\$ -	\$ 1,268,420
	Market Integration	18230466	\$ 317,898	\$ -	\$ 200,276	\$ -	\$ 34,800	\$ 147,900	\$ -	\$ -	\$ -	\$ -	\$ 700,874
	Energy Efficient Communities	18230811	\$ 338,694	\$ -	\$ 213,377	\$ -	\$ 13,920	\$ 11,310	\$ -	\$ -	\$ -	\$ -	\$ 577,301
	Trade Ally Support	18230730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92,600	\$ -	\$ -	\$ 92,600
	Marketing Research	TBD	\$ 385,191	\$ -	\$ 242,670	\$ -	\$ 6,525	\$ 587,250	\$ 2,700	\$ 2,000	\$ -	\$ -	\$ 1,226,336
Total, Portfolio Support			\$ 2,703,955	\$ -	\$ 1,703,492	\$ 77,210	\$ 120,108	\$ 2,346,876	\$ 95,738	\$ 102,340	\$ -	\$ -	\$ 7,149,718
Research & Compliance													
	Conservation Supply Curves	18230809	\$ 226,954	\$ -	\$ 142,981	\$ -	\$ 4,350	\$ 295,800	\$ -	\$ -	\$ -	\$ -	\$ 670,085
	Strategic Planning	18230437	\$ 288,893	\$ -	\$ 182,003	\$ -	\$ 6,090	\$ 113,100	\$ 2,610	\$ 1,740	\$ -	\$ -	\$ 594,436
	Program Evaluation	18230802	\$ 455,250	\$ -	\$ 286,808	\$ -	\$ 33,700	\$ 2,480,000	\$ -	\$ 520,000	\$ -	\$ -	\$ 3,775,758
	Program Support	18230810	\$ 444,000	\$ -	\$ 279,720	\$ -	\$ 10,000	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 763,720
Total, Research & Compliance			\$ 1,415,097	\$ -	\$ 891,511	\$ -	\$ 54,140	\$ 2,918,900	\$ 2,610	\$ 521,740	\$ -	\$ -	\$ 5,803,998
Other Electric Programs													
	Net Metering	18230128	\$ 391,690	\$ -	\$ 246,765	\$ -	\$ 14,059	\$ 4,000	\$ -	\$ 19,600	\$ -	\$ -	\$ 676,114
	Renewable Energy Education	18230492	\$ 125,141	\$ -	\$ 78,839	\$ -	\$ 8,059	\$ -	\$ 16,000	\$ -	\$ 30,000	\$ -	\$ 258,039
	C/I Load Control	18230438	\$ 370,000	\$ 0	\$ 233,100	\$ 8,000	\$ 14,900	\$ 1,750,000	\$ 30,000	\$ 350,000	\$ -	\$ -	\$ 2,756,000
	Residential Demand Response	18230439	\$ 47,000	\$ -	\$ 29,610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 76,610
Total, Other Electric Programs			\$ 933,831	\$ 0	\$ 588,314	\$ 8,000	\$ 37,018	\$ 1,754,000	\$ 46,000	\$ 369,600	\$ 30,000	\$ -	\$ 3,766,763
GRAND TOTAL, ELECTRIC PROGRAMS			\$ 16,116,059	\$ 1,185,974	\$ 10,905,660	\$ 4,887,100	\$ 540,066	\$ 33,422,591	\$ 399,608	\$ 1,302,754	\$ 124,669,419	\$ -	\$ 193,429,229

Table 10: 2012-2013 EES Gas Budgets by Cost Element Group

Schedule	Description	Order Number (Click on the order# below to link to the detail page)	Labor	Marketing Labor	Overhead	Marketing	Employee Expense	Outside Services	Materials	Miscellaneous	DBtC	Revenue	Total Budget
Residential Energy Management													
G203	Low Income Weatherization	18230661	\$ 39,954	\$ 4,374	\$ 27,926	\$ 2,000	\$ 4,800	\$ 9,600	\$ 8,076	\$ 594	\$ 1,024,122	\$ -	\$ 1,121,446
G214	HomePrint - Gas	18230635	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G214	SF Existing Water Heat - Gas	18230636	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G214	SF Existing Wx - Gas	18230637	\$ 677,013	\$ 36,450	\$ 449,482	\$ 90,000	\$ 6,000	\$ 145,748	\$ 400,000	\$ 32,400	\$ 4,237,274	\$ -	\$ 6,074,367
G214	SF Existing Space Heat - Gas	18230638	\$ 283,499	\$ 42,525	\$ 205,395	\$ 100,000	\$ 10,800	\$ 36,000	\$ 30,800	\$ 20,400	\$ 3,528,800	\$ -	\$ 4,258,219
G214	Residential Showerheads Gas	18230700	\$ 33,851	\$ 24,300	\$ 36,635	\$ 89,100	\$ 3,000	\$ 64,800	\$ 1,000	\$ 1,000	\$ 198,000	\$ -	\$ 451,686
G214	Home Appliances	Savings Only	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G215	Energy Star Manufactured Home Gas	18230442	\$ 15,233	\$ 6,683	\$ 13,807	\$ 72,254	\$ 10,000	\$ 5,000	\$ 2,400	\$ 10,000	\$ 317,500	\$ -	\$ 452,877
G215	Single Family New Construction - Gas	18230684	\$ 5,996	\$ 4,000	\$ 6,297	\$ 4,674	\$ 500	\$ -	\$ -	\$ -	\$ 4,500	\$ -	\$ 25,967
G217	Multi-Family Retrofit Gas	18230736	\$ 81,467	\$ 14,580	\$ 60,510	\$ 15,000	\$ 5,960	\$ -	\$ 500	\$ 4,810	\$ 271,978	\$ -	\$ 454,805
G218	Multi-Family New Construction Gas	18230673	\$ 70,000	\$ 7,100	\$ 48,573	\$ 7,500	\$ 5,960	\$ 200	\$ 100	\$ 2,970	\$ 523,476	\$ -	\$ 665,879
G249	SF Existing Pilots - Gas	18230639	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G249	Home Energy Reports G	18230738	\$ 16,925	\$ 12,150	\$ 18,317	\$ -	\$ -	\$ 74,298	\$ -	\$ -	\$ 74,298	\$ -	\$ 195,989
Total, Residential Energy Management			\$ 1,223,938	\$ 152,162	\$ 866,943	\$ 380,528	\$ 47,020	\$ 335,646	\$ 442,876	\$ 72,174	\$ 10,179,948	\$ -	\$ 13,701,235
Business Energy Management													
G205	Commercial/Industrial Retrofit	18230731	\$ 897,400	\$ 34,000	\$ 586,800	\$ 18,000	\$ 17,400	\$ 221,500	\$ 5,740	\$ 4,400	\$ 4,059,500	\$ -	\$ 5,844,740
G208	Resource Conservation Manager	18230691	\$ 513,822	\$ 21,870	\$ 337,486	\$ 12,000	\$ 6,195	\$ 314,500	\$ 38,047	\$ 1,581	\$ 756,000	\$ -	\$ 2,133,240
G251	Commercial/Industrial New Construction	18230706	\$ 286,800	\$ 34,000	\$ 202,200	\$ 9,000	\$ 14,400	\$ 28,500	\$ -	\$ 3,800	\$ 640,000	\$ -	\$ 1,218,700
G261	Technology Evaluation	18230694	\$ 9,000	\$ -	\$ 5,600	\$ -	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 54,600
G262	Business Rebates	18230697	\$ 119,400	\$ 17,000	\$ 86,000	\$ 12,000	\$ 800	\$ 17,300	\$ 4,300	\$ 200	\$ 1,054,800	\$ -	\$ 1,311,800
Total, Business Energy Management			\$ 1,826,422	\$ 106,870	\$ 1,218,086	\$ 51,000	\$ 38,795	\$ 581,800	\$ 88,087	\$ 9,981	\$ 6,510,300	\$ -	\$ 10,563,080
Portfolio Support													
(Title pg)	Customer Engagement & Education												
	Energy Advisors	18230704	\$ 179,743	\$ -	\$ 113,238	\$ -	\$ 8,710	\$ 6,292	\$ 1,560	\$ -	\$ -	\$ -	\$ 309,543
	Events	18230653	\$ 52,168	\$ -	\$ 32,866	\$ 4,548	\$ 452	\$ 31,568	\$ 1,800	\$ 1,170	\$ -	\$ -	\$ 124,572
	Brochures	18230685	\$ -	\$ -	\$ -	\$ 8,278	\$ -	\$ 650	\$ 7,410	\$ -	\$ -	\$ -	\$ 16,338
	Education	18230671	\$ 16,593	\$ -	\$ 10,454	\$ -	\$ 370	\$ 8,450	\$ 2,600	\$ -	\$ -	\$ -	\$ 38,467
(Title pg)	Web Experience												
	Mainstreaming Green	18230737	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,780	\$ -	\$ -	\$ -	\$ -	\$ 190,780
	Market Integration	18230732	\$ 47,502	\$ -	\$ 29,926	\$ -	\$ 5,200	\$ 22,100	\$ -	\$ -	\$ -	\$ -	\$ 104,728
	Energy Efficient Communities	18230657	\$ 50,590	\$ -	\$ 31,872	\$ -	\$ 2,080	\$ 1,690	\$ -	\$ -	\$ -	\$ -	\$ 86,232
	Trade Ally Support	18230698	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,000	\$ -	\$ -	\$ 36,000
	Marketing Research	TBD	\$ 57,557	\$ -	\$ 36,261	\$ -	\$ 975	\$ 87,750	\$ 400	\$ 300	\$ -	\$ -	\$ 183,243
Total, Portfolio Support			\$ 404,154	\$ -	\$ 254,617	\$ 12,826	\$ 17,787	\$ 349,280	\$ 13,770	\$ 37,470	\$ -	\$ -	\$ 1,089,903
Research & Compliance													
	Conservation Supply Curves	18230703	\$ 33,913	\$ -	\$ 21,365	\$ -	\$ 650	\$ 44,200	\$ -	\$ -	\$ -	\$ -	\$ 100,128
	Strategic Planning	18230670	\$ 43,168	\$ -	\$ 27,196	\$ -	\$ 910	\$ 16,900	\$ 390	\$ 260	\$ -	\$ -	\$ 88,824
	Program Evaluation	18230699	\$ 93,380	\$ -	\$ 58,829	\$ -	\$ 7,000	\$ 790,000	\$ -	\$ -	\$ -	\$ -	\$ 949,209
	Program Support	18230688	\$ 70,000	\$ -	\$ 44,100	\$ -	\$ 2,400	\$ 6,000	\$ -	\$ -	\$ -	\$ -	\$ 122,500
Total, Research & Compliance			\$ 240,461	\$ -	\$ 151,490	\$ -	\$ 10,960	\$ 857,100	\$ 390	\$ 260	\$ -	\$ -	\$ 1,260,661
GRAND TOTAL, GAS PROGRAMS			\$ 3,694,975	\$ 259,032	\$ 2,491,136	\$ 444,354	\$ 114,562	\$ 2,123,826	\$ 545,123	\$ 119,885	\$ 16,690,248	\$ -	\$ 26,614,880

Table 11 is the portfolio view of 2012's annual budget and conservation target figures.

Table 11: 2012-Specific EES Conservation Targets and Budgets by Program

Schedule Nos.	Program Name	MWH Savings	Electric Rider Budget	Therm Savings	Gas Tracker Budget	Total Tariff Budget
Residential Energy Management						
E201 G203	Low Income Weatherization	2,100	\$ 2,946,000	42,300	605,000	\$ 3,551,000
E214 G214	Single Family Existing (Subtotal)	125,400	\$ 30,332,000	1,698,700	\$ 5,443,000	\$ 35,775,000
	Residential lighting	72,300	\$ 12,738,000			\$ 12,738,000
	Space heat	5,900	\$ 2,638,000	742,700	\$ 2,113,000	\$ 4,751,000
	Water heat	800	\$ 317,000	0	\$ -	\$ 317,000
	HomePrint	4,100	\$ 1,790,000	0	\$ -	\$ 1,790,000
	Home Appliances	25,100	\$ 8,126,000			\$ 8,126,000
	Showerheads	1,400	\$ 188,000	66,300	\$ 220,000	\$ 408,000
	Weatherization	10,300	\$ 4,320,000	543,000	\$ 3,012,000	\$ 7,332,000
	Home Energy Reports	5,500	\$ 215,000	346,700	\$ 98,000	\$ 313,000
E215 G215	Single Family New Construction	1,500	\$ 1,111,000	31,900	\$ 309,000	\$ 1,420,000
E216	Fuel Conversion	2,500	\$ 804,000			\$ 804,000
E217 G217	Multi Family Existing	16,800	\$ 6,888,000	25,000	\$ 227,000	\$ 7,115,000
E218 G218	Multi Family New Construction	1,000	\$ 617,000	53,600	\$ 354,000	\$ 971,000
E249 G249	Pilots, excluding:	0	\$ -	0	\$ -	\$ -
	Total, Residential Programs	149,300	\$ 42,698,000	1,851,500	\$ 6,938,000	\$ 49,636,000
Business Energy Management						
E250 G205	Commercial / Industrial Retrofit	68,600	\$ 20,084,000	478,000	\$ 2,895,000	\$ 22,979,000
E251 G251	Commercial/Industrial New Construction	3,500	\$ 2,214,000	100,000	\$ 609,000	\$ 2,823,000
E253 G208	Resource Conservation Manager	20,000	\$ 1,994,000	1,000,000	\$ 1,119,000	\$ 5,339,148
E255	Small Business Lighting Rebate	24,100	\$ 7,548,000			\$ 7,548,000
E258	Large Power User - Self Directed Program	16,500	\$ 5,169,000			\$ 5,169,000
E261 G261	Energy Efficient Technology Evaluation		\$ 30,000		\$ 27,000	\$ 57,000
E262 G262	Commercial Rebates	27,200	\$ 4,832,000	1,407,000	\$ 641,000	\$ 5,473,000
	Subtotal, Business Programs	159,900	\$ 41,871,000	2,985,000	\$ 5,291,000	\$ 47,162,000
Regional Efficiency Programs						
E254	NW Energy Efficiency Alliance	19,400	\$ 5,261,000			\$ 5,261,000
	Generation, Transmission and Distribution	8,100	\$ 312,000			\$ 312,000
	Subtotal, Regional Programs	27,500	\$ 5,573,000		\$ -	\$ 5,573,000
EES Portfolio Support						
	Customer Engagement and Education		\$ 1,635,000		\$ 245,000	\$ 1,880,000
	Energy Advisors		\$ 1,037,000		\$ 155,000	\$ 1,192,000
	Events		\$ 414,000		\$ 63,000	\$ 477,000
	Brochures		\$ 54,000		\$ 8,000	\$ 62,000
E202 G207	Education		\$ 130,000		\$ 19,000	\$ 149,000
	Web Experience		\$ 983,000		\$ 148,000	\$ 1,131,000
	Mainstreaming Green (Subtotal)		\$ 636,000		\$ 96,000	\$ 732,000
	Web Development		\$ 169,000		\$ 25,000	\$ 194,000
	Web content, maintenance + analytics		\$ 218,000		\$ 33,000	\$ 251,000
	Online customer tools		\$ 235,000		\$ 35,000	\$ 270,000
	E-news		\$ 9,000		\$ 2,000	\$ 11,000
	Miscellaneous applications		\$ 5,000		\$ 1,000	\$ 6,000
	EES Market Integration		\$ 347,000		\$ 52,000	\$ 399,000
	Energy Efficient Communities		\$ 283,000		\$ 42,000	\$ 325,000
	Trade Ally Support		\$ 46,000		\$ 18,000	\$ 64,000
	Marketing Research		\$ 567,000		\$ 85,000	\$ 652,000
	Subtotal, Portfolio Support		\$ 3,514,000		\$ 538,000	\$ 4,052,000
EES Research & Compliance						
	Conservation Supply Curves		\$ 424,000		\$ 63,000	\$ 487,000
	Strategic Planning		\$ 350,000		\$ 52,000	\$ 402,000
	Program Evaluation		\$ 2,021,000		\$ 508,000	\$ 2,529,000
	Program Support		\$ 377,000		\$ 60,000	\$ 437,000
	Subtotal, Research & Compliance	0	\$ 3,172,000		\$ 683,000	\$ 3,855,000
	Total, Efficiency Programs Included in CE Calculations	336,700	\$ 96,828,000	4,836,500	\$ 13,450,000	\$ 110,278,000
Other Electric Programs						
E150	Net Metering		\$ 293,000			\$ 293,000
E248	Renewables Education		\$ 142,000			\$ 142,000
E26x	C/I Load Control		\$ 1,176,000			\$ 1,176,000
E249a	Residential Demand Response Pilot		\$ 37,000			\$ 37,000
	Subtotal, Other Electric Programs		\$ 1,648,000		\$ -	\$ 1,648,000
	GRAND TOTAL All EES Programs	38.4 aMW	\$ 98,476,000	4,836,500	\$ 13,450,000	\$ 111,926,000

BLUE print represents a former Support Activity budget amount.

Please note that Schedules E200, G202, E206, G207, E/G260 and E/G270 are retired in 2012.

Blue cells = use for 10% "info-only" calculation: 3.7% 4.2%
 HER program costs excluded from "info-only" calculation because savings will be measured.

Purple cells = use for 1 - 3% eval calculation: 2.4% 4.2%

2012-2013 Cost Effectiveness Estimates

A detailed cost effective analysis by program is presented in the 2012-2013 Biennial Conservation Plan's **Exhibit 2**. Consistent with condition K(10)(b)), PSE added two new cost effectiveness tests to its portfolio analysis: the Ratepayer Impact Measure (RIM) and Participant Cost (PCT) Tests. The results of those tests are referenced in Table 3 on [page 9](#), and detailed in Exhibit 2. Table 12a and 12b provide summary sector-view figures. The RIM and PCT are omitted from these tables.

Table 12a: 2012-2013 Electric Cost Effectiveness Estimates by Sector

Electric

	UC	TRC
Residential	2.75	1.97
Business	3.03	2.16
Regional Programs	2.81	2.69

Table 12b: 2012-2013 Gas Cost Effectiveness Estimates by Sector

Gas

	UC	TRC
Residential	2.97	1.33
Business	2.64	1.40

Tariff Schedule Revisions

As has become standard practice, PSE updates several tariff schedules' grammar and punctuation, and adjusts a small number of words to clarify concepts or offerings. These revisions are noted within the right-hand margin of each tariff sheet, consistent with requirements outlined in WAC 480-80-105 (Tariff symbols). This section provides highlights of key tariff schedule updates.

Cancelled Tariff Schedules

- E/G 200 (REM), E/G 260 (BEM): Information Services
Individual components that formerly comprised this offering are now represented in Portfolio Support and Research & Compliance.
- E/G 270: Local Infrastructure & Market Transformation
This program is not geared to customers in a strict sense. The program title is being revised to Trade Ally Support, which is a more accurate representation of this program's activities.
- E257: LED Traffic Signals
The program has experienced very low volume over the last two years. LED Traffic Signals will achieve greater administrative efficiencies when managed within the Business Rebates program, Schedule 262. This service will continue and is added as a suite of measures to Schedule 262.

New Tariff Schedules

- E 271: Demand Response Program
 - Schedule 249A will remain active until all remaining expenses are paid in 2012-2013.
(Modifications will be made to show that no new pilots will be accepted.)
 - New demand response programs will generally fall into the "270s" range.
- E 292: Generation & Distribution Efficiencies
 - This new Schedule will be referenced in several areas of Schedule 83.

Revised Tariff Schedules

- Schedule 83 and 183 (Overall Controlling Conservation Program Schedules, renews most programs for another biennium)
 - Updated budget section (No. 10), clarified some services.
 - (83 only) Added paragraph in Section 5, discussing Generation, T&D, and referencing Schedule 292.

-
- E 216: Fuel Conversion
 - Removed sentence regarding varying customer eligibility by structure & added sentence excluding structures in Multifamily campuses.
 - E/G 217: Multifamily Existing, E/G 218: MF New Construction
 - Added “campus” definition to Availability section
 - G 203: Low Income Weatherization
 - Section 3 was adjusted to match the funding language in Schedule 201
 - No adjustments to 201: LIW, 214: Single Family Existing, 215: Single Family New Construction

 - E 250, E 251, E 262: Commercial/Industrial Retrofit, C/I New Construction, Business Rebates
 - Adjusted Funding sections to be consistent with Schedule 258 requirements.
(Gas Schedules not affected)
 - E/G 250, E/G 262: C/I Retrofit, Business Rebates
 - Added language to indicate that consultants or contractors may perform measure installation.
 - E 253, G208: RCM
 - Added language to Services Section to indicate that partial funding of an RCM position is subject to the customer completing specific deliverables.
 - E 255: Small Bus. Lighting
 - Added language to Funding Section to indicate that funding is subject to CE standard.
 - E/G 261: E. E. Technical Evaluation
 - Added language to Funding Section to indicate that program is not subject to achieve savings sufficient to meet CE standards.

Program Plans

This section provides a summary of program initiatives, revisions being implemented in this biennium, new programs, and new delivery methods and channels by sector. Program details are outlined in the attached Exhibit 3, Program Details.

Residential Sector

No new pilot programs are incorporated into the Residential Energy Management (REM) portfolio for the 2012-2013 biennium. PSE plans to achieve its savings targets using programs and measures that have been proven through either RTF or engineering calculations and evaluated to meet or exceed cost effectiveness thresholds.

The Residential Energy Management sector is made up of the following programs (each program's corresponding Schedule precedes its name):

- E201/G203 Low Income Weatherization
- E214/G214 Single Family Existing, consisting of the following groupings:
- E215/G215 Single Family New Construction
- E216 Fuel Conversion
- E217/G217 Multifamily Existing
- E218/G218 Multifamily New Construction

Tables 13 and 14 represent REM's planned electric and natural gas conservation targets, with their corresponding budgeted amounts:

Table 13: REM 2012-2013 Electric Conservation Targets and Budgets by Program

Electric Program	Budget	Savings MWh	% of Budget
Residential Lighting	\$25,280,913	143,115	30%
Home Appliances	\$16,479,325	51,699	19%
MultiFamily Existing	\$13,707,765	33,570	16%
Weatherization	\$8,655,491	20,524	10%
Low Income Weatherization	\$5,374,311	3,880	6%
Space Heat	\$5,351,337	12,038	6%
HomePrint	\$3,590,954	8,100	4%
Single Family New Construction	\$2,231,612	3,091	3%
Fuel Conversion	\$1,641,609	5,195	2%
MultiFamily New Construction	\$1,277,858	1,910	2%
Water Heat	\$638,545	1,709	1%
Home Energy Reports	\$430,901	10,996	1%
Showerheads	\$392,490	3,107	0%
Total	\$85,053,111	298,933	100%

Table 14 REM 2012-2013 Gas Conservation Targets and Budgets by Program

Gas Program	Budget	Savings Therms	% of Budget
Single Family Existing Weatherization	\$6,074,367	1,089,809	44%
Single Family Existing Space Heat	\$4,258,219	1,490,588	31%
Low Income Weatherization	\$1,121,446	77,992	8%
Single Family New Construction	\$478,844	63,800	3%
Home Energy Reports	\$195,989	693,448	1%
MultiFamily Retrofit	\$454,805	49,936	3%
Residential Showerheads	\$451,686	145,200	3%
MultiFamily New Construction	\$665,879	100,309	5%
Home Appliances (savings only)		79,835	0%
Total	\$13,701,235	3,790,917	100%

Notable Revisions

The Residential Energy Management Sector adds several innovative customer offerings to its suite, which will be described in detail in the following pages of this document:

- TV turn-in in Home Appliances
- LEDs in the Residential Lighting
- Multifamily Air Sealing
- No Natural Gas Water Heat
- No Pilot Programs budgeted

Three 2011 pilot measures have been converted into full measures and incorporated into their respective Tariff Schedules for 2012-2013. These are:

- Home Energy Reports
- LED Downlighting
- Gas Fireplaces

Unless otherwise noted, program summaries included in the following discussions apply to both gas and electric initiatives.

Low Income Weatherization

Savings goals must be achieved in this program without ARRA funding, proceeds from the Enron settlement, and reductions in State and Federal funding. PSE shareholder funding is still available, in accordance with Section G(14) of the 2010 Electric Settlement Terms.

Single Family Existing

This Sector group is the largest contributor of savings in REM and is made of these programs:

- Residential Lighting
- Home Appliances
- Showerheads
- Space and Water Heat
- Weatherization
- HomePrint
- Home Energy Reports

REM's Residential Lighting program makes up 25 percent of the sector's electric budget and almost half of the savings. REM will achieve the savings target by:

- Increasing promotional activities, such as creating new Point Of Purchase materials and integration of awareness messaging.
- Engaging rebate processing and field service contractors.
- Interfacing with more channel partners and their departments.
- Increasing customer incentives; LED lamps will receive focused attention.
 - Incentives must also offset an anticipated increase in retail pricing due to China's rare minerals market situation.

It is important to note that, with the reduction of RTF deemed CFL spiral bulb savings, an additional 12 percent of units must move through the system simply to stay even with current savings levels.

REM's Home Appliances program is broadening its suite with the introduction of a new TV Turn-in program. REM is also widening the scope of its Refrigerator and Freezer decommissioning and Refrigerator Replacement programs.

The Space Heat program is increasing its incentives due to the reduction of the Federal Energy Tax Credit and diminished ARRA funding.

In order to account for a 60 percent reduction in RTF's CFL Direct Install savings, the HomePrint program is adding leave-behind showerheads to recoup these lost savings. The program is also increasing the incentive amount per home \$10 each to align with the market conditions and rising service fees.

REM's Weatherization program is taking a number of steps to respond to rising material costs for insulation and the reduction of federal assistance programs:

- Streamlined measure mix to base savings on average heating type
 - reduces administrative cost for PSE / third party contractors
- Addition of windows, in PSE electrically heated homes, at \$750 max incentive
- Increased Mobile Home Duct Sealing units by 23 percent
- Retooling of duct sealing program reduced incentive \$100 unit

Home Energy Reports is REM's newest savings program for 2012-2013. Receiving full support of the Conservation Resource Advisory Group (CRAG) in late 2011⁹, Home Energy Reports offer a limited group of customers access to energy information in a useful and meaning presentation. The Company will maintain the number of customers established while the program was a pilot, and will continue to engage the CRAG as the program progresses and additional customer behaviors are identified.

Savings will be determined annually, using a specifically designed evaluation protocol and customer surveys to ensure measures installed as a result of the reports are not double-counted.

Single Family New Construction

This program, due to lower natural gas avoided costs and new code changes, is putting gas water heaters, tank less water heaters, and duct sealing on indefinite hiatus. The program's reduction of one FTE decreases the program's electric and gas labor overhead costs.

Multifamily Existing

The Multifamily Existing program is adding a new air sealing measure. The costs for this program include contractor program implementation, and a savings evaluation component. The program is also increasing the incentives for windows and insulation to help offset increased contractor material costs.

Multifamily New Construction

REM expects customer requests for condensing boilers, condensing water heaters and showerheads to increase in 2012-2013. 2011-2012 grants currently in construction will be completed and paid in the 2012-2013 cycle. Although approximately half of the prescriptive gas measures will be put on indefinite hiatus, these requests will keep gas program costs near their current level. Using the Business Energy Management grant calculation tool, Autofund, these measures will maintain cost-effectiveness.

⁹ CRAG support was conditioned on continuing evaluation development of potential double-counting issues, customer stratification analyses, and ongoing understanding of participant behavior.

Marketing Plan

Efficiency of the marketing spend will be a continuing theme for EES marketing. In addition to continuing the trade ally marketing collaboration, we will put more emphasis on communicating our program offerings electronically to our customers.

We've found that our response rate nearly doubles with email campaigns versus direct mail. We may also consider utilizing "PURLS", or personalized URL's, which can provide dynamic information in real time and more accurately track the triggers which resulted in the customer's energy efficient retrofits.

Business Sector

Schedule 257, LED Traffic Signals is retired at the beginning of 2012. The program is now incorporated into the Business Rebates suite of programs under Schedule 262.

Schedule 258, Large Power, Self-Directed, was re-filed as a completely revised program in August 2011, and those changes were allowed to go into effect by the WUTC on September 15, 2011.

Schedule 261, Energy Efficiency Technology Evaluation was relocated from the Support Activities section of the 2010-2011 alignment to the Business Sector at the beginning of 2012.

The programs that comprise the Business Energy Management portfolio are:

- E/G 250 C/I Retrofit
- E/G 262 Commercial Rebates
- E253/G208 Resource Conservation Manager
- E255 Small Business Lighting
- E/G 251 C/I New Construction
- E/G 261 Energy Efficient Technology Evaluation
- E258 Large Power User Self-Directed

Tables 15 and 16 illustrate the savings and budget distributions in Business Energy Management for both electric and natural gas.

Table 15: BEM Electric Conservation Targets and Budgets

Electric Program	Budget	Savings MWh	% of Budget
Commercial/Industrial Retrofit	\$39,102,000	138,350	49%
Small Business Lighting	\$12,890,560	40,100	16%
High Voltage, Self-Directed	\$10,337,100	33,000	13%
Commercial Rebates	\$9,759,960	54,860	12%
C/I New Construction	\$4,428,240	7,000	6%
Resource Conservation Manager	\$3,933,100	38,750	5%
E. E. Technology Evaluation	\$60,400	0	0%
Total	\$80,511,360	312,060	100%

Table 16: BEM Gas Conservation Targets and Budgets

Gas Program	Budget	Savings Therms	% of Budget
Commercial/Industrial Retrofit	\$5,844,740	952,000	55%
Commercial Rebates	\$1,311,800	2,806,000	12%
C/I New Construction	\$1,218,700	200,000	12%
Resource Conservation Manager	\$2,133,240	1,800,000	20%
E. E. Technology Evaluation	\$54,600	0	1%
Total	\$10,563,080	5,758,000	100%

Unless otherwise specifically noted, program summaries included in the following discussions apply to both gas and electric initiatives.

Commercial/Industrial (C/I) Retrofit

This program will utilize 19 Energy Management Engineers (EMEs) to process over 800 electric and over 100 natural gas custom grants per year during 2012-2013. It is important to note that gas projects tend to require more EME labor per project, as the analyses and verification processes are more analytical since end-use load monitoring technology (data logging of pre/post natural gas consumption by individual equipment items) is often not possible, requiring more substantial energy analysis calculations and modeling. In addition to facilitating custom grant agreements, EMEs are responsible for developing and continuously improving savings analysis tools, and program processes. The C/I Retrofit program will also implement four contracted programs, which are anticipated to generate 38,300 MWh of electric savings in 2012-2013. These are:

- Energy Smart Grocer: 18,000 MWh
- Data Center Efficiency: 8,000 MWh
- Industrial Systems Optimization: 9,000 MWh
- Building Tune-Up & Tracking: 3,300 MWh

A key revision in C/I Retrofit's contracted program is the change of Energy Smart Grocer to "Energy Smart". This emphasizes the broadening of the initiative's scope to include convenience stores and other retail establishments, and allows program marketing and communication to remain consistent throughout the region. This program provides no-cost energy audits, low-cost direct installation of measures such as CFLs and beverage cooler controls for instant savings, dedicated on-site Field Energy Analysts to provide project guidance, and financial incentives for installed upgrades.

The new Data Center Efficiency program will focus on mid-size data centers, which comprise more than 50 percent of server facilities. The program will be structured to offer tiers of measures, including common measures, such as lighting and variable speed drives, standard system optimization measures, and more in-depth cooling system upgrades. Program deliverables include audits, sub-metering and data logging, performance monitoring, financial incentives for installed measures, and facilitated implementation.

The Industrial System Optimization program will focus on providing financial and technical assistance to identify and implement Performance Tracking System (PTS) plans, project scoping and Implementation of operational measures with savings quantified via the PTS. The program will target at least 20 projects with an average of 20 "action items" per project. These will focus on refrigeration, compressed air, pumps, fans and lighting.

The last planned contracted C/I Retrofit program will be Building Tune-up and Tracking. The suite of services offered through this program include a survey of building and operations, energy baseline diagnostics, reporting,, project implementation assistance, and six and 12-month savings reporting with financial incentives provided based on performance results..

The remaining C/I Retrofit initiatives will focus on core strengths in delivering in-house custom grant agreements, Building Energy Optimization Program (BEOP) projects, and other custom measures with total projected two-year savings of 100,000 MWh.

Commercial Rebates

The Commercial Rebate group will continue offering its successful prescriptive rebates in kitchen, hospitality and other commercial establishments. As mentioned earlier, the program will absorb the LED Traffic Signal program, formerly offered under the terms of Schedule 257. As the traffic signal market has transformed to LED technology becoming standard practice, the quantity of measures funded under this program has declined in recent years. With limited participation anticipated in 2012-2013, the move of this program into the Commercial Rebates portfolio will offer administrative efficiency while maintaining a high degree of customer service.

Commercial Rebate programs will increase conservation efforts related to interior LED lighting, more efficient T-8 lighting products, commercial kitchens and in the hospitality and lodging industry. The Commercial Rebates group also contracts some of its initiatives, including Premium HVAC Service, its lighting Point of Sale (POS) incentives, low-flow pre-rinse spray heads and aerator installations, green motor re-winds, and "CoolerMiser" direct installations.

It is expected that contracted Commercial Rebate initiatives will generate over 28,000 MWh in electric savings, the largest portion being attributed to pre-rinse spray heads, followed by a new program, Small Business Direct Installs.

The Small Business Direct Install program targets small business customers with less than 50 kW demand. The program provides a no-cost energy audit and direct installation of measures such as T12 to T8 linear fluorescent lighting, HVAC tune-ups, CFLs, refrigeration measures, weatherization seals, and hand washing sink aerators. Many of these are installed at no cost to the customer. A customer contribution will be required on the more expensive improvements. The program targets 40,000 customers who are considered inappropriate for custom grant participation, with anticipated participation by approximately ten percent of this customer base in 2012-2013. It makes use of many RTF deemed measures and leverages community-level relationships for the implementation team. It is expected that this program will generate 6,300 MWh of electric and 22,000 therms of gas savings in 2012-2013.

Resource Conservation Manager

It is expected that the RCM program provides financial incentives to customers who meet program deliverables and produce documented energy savings over established baseline use. Additionally, the program provides a menu of energy management support services valued at more than \$22,000 per contract. These include Resource Accounting Software, Utility Manager Database Setup, Monthly Data Downloads, Annual Savings Analysis, and Energy Interval Services, among others. The program expects to save over 38,000 MWh of electric and 1.8 million therms of gas over this biennium.

Small Business Lighting

The Small Business Lighting program plans to achieve over 40,000 MWh of electric savings in the 2012-2013 biennium by increasing its emphasis on comprehensive lighting upgrades, including lighting controls, exterior lighting, high efficiency T8s, and LEDs.

Commercial/Industrial New Construction

The Whole Building Prescriptive Approach was cancelled in late 2011 due to the advent of the 2009 WSEC update, which specifies efficiency levels essentially equivalent to previously funded measures. Further measure enhancements are less cost-effective. Therefore, the C/I New Construction program will increase its emphasis on commissioning and will fund projects up to 100 percent of the incremental measure cost where cost effective. This strategy will help the program achieve 7,000 MWh of electric and 200,000 therms of gas savings in 2012-2013.

Technology Evaluation

As mentioned in the introduction, this program was relocated in Exhibit 1 to the Business Energy Management sector (it was formerly located in the Support Activities area). The program is not intended for basic research or product development. Rather, it identifies new technologies (that are commercially viable and readily available) that are suitable for C/I programs. A BEM consulting engineer monitors the progress of technologies while gaining confidence in energy analyses and savings estimates.

Large Power User Self-Directed

As detailed in its August 16, 2011 filing, BEM's Large Power User Self-Directed program's budget and savings goals are listed in Exhibit 1. The changes proposed to this program on that date were allowed to go into effect by the WUTC at the Open Meeting on September 15, 2011.

Marketing Plan

In addition to the ongoing relationship-based marketing to the C and I segment, we will be focusing more on specific target markets, such as hospitality industry customers, healthcare customers, and commercial kitchen customers to communicate about packages of energy efficiency measures that will benefit these groups, as well as yield significant savings.

EES Marketing Overview

As detailed in **Exhibit 7**, the 2012-2013 EES Marketing Plan Overview, the Efficiency Communications team has developed a comprehensive marketing strategy for all EES programs, designed to engage and clearly inform PSE customer energy efficiency decisions. Using targeted and strategic promotional outreach for the various EES market sectors, anticipating customer need, fostering community within specific channels, the Team will implement a variety of marketing programs, promotions, communications, and events.

The Marketing Team will make clear alignments within the entire scope of EES programs, and develop new efforts to reach customers in the PSE regional hubs, using those channels for efficient delivery of EES opportunities. The Team will use and analyze demographic, end-use equipment and structural data, and information provided by the EES Marketing Research function to tailor the Team's tactics for addressing customer perceptions and motivational barriers to adoption.

As described in the Portfolio Support/Web Experience section of this document, the Efficiency Communications team is also directly involved with driving PSE.com content for EES. These efforts include developing online rebate application forms, enhanced efficiency analytical tools, and a higher degree of customer interactivity.

Regional Programs

Northwest Energy Efficiency Alliance

PSE provides the NEEA 2012-2013 forecast of activities and initiatives in Exhibit 3, Program Details. PSE extends its appreciation to the NEEA staff for the additional effort and resources expended to develop this content.

PSE's budget of \$10.5 million for NEEA support is based on the contracted amount. PSE's savings target based on a factor of 75 percent of the NEEA market effect estimates for 2012-2013. This ratio takes into account the time lag of actual savings reporting. PSE's reported savings will neither be increased nor be decreased based on final NEEA reporting.

PSE has established a target of 38,829 MWh of electric savings resulting from NEEA initiatives. Through 2012-2013, PSE will continue its work with NEEA to establish consistent reporting for all participating utilities.

Generation and Distribution

This new initiative is consistent with the Company's IRP, which indicates that the ten-year conservation potential and two-year target includes efficiency gains in generation and distribution facilities within the state, and complies with the definition outlined in RCW 19.285.030(4):

“Conservation” means any reduction in electric power consumption resulting from increases in the efficiency of energy use, production, or distribution.”

The Company plans to acquire over 16,000 MWh of electric savings through Generation and Distribution efficiency improvements. Plans include focus on Conservation Voltage Regulation (CVR) and phase balancing at 12 substations during 2012-2013, plus eight specific generation plant projects in the state, consisting mainly of lighting upgrades. **Exhibit 3**, Program Details, provides an overview of how PSE will execute the necessary efficiency initiatives and how EES will provide the interface between the generating and distribution facilities and the PSE Stakeholders. These programs will operate under Schedule 292.

Portfolio Support

The Portfolio Support grouping was created at the end of 2011 to provide stakeholders with a more accurate and transparent representation of activities that are intended to drive PSE customers to efficiency programs in general. These activities are not particular to a specific conservation program. Instead, they apply to a broad spectrum of EES functions. It is made up of programs that were formerly included in the sector titled Support Activities.

Several of these activities and functions had, in prior years, been represented as Conservation Schedules. These are retired in 2012, as they did not meet the strict definition, or all of the content requirements stipulated in WAC 480-80-030 and RCW chapter 80.36. These are Schedules E 200/G 206 (Residential Information Services), Schedules E/G 260 (Business Information Services) and E/G 270 (Local Infrastructure and Market Transformation¹⁰).

Customer Engagement & Education

This activity grouping was created and reviewed with the CRAG in PSE's July 21 2011 meeting. Shortly after filing its 2011 Annual Conservation Plan, it became clear that PSE needed to present these activities and functions in such a way that:

- Classifying those activities that fall under terms of condition K(7)(d) was more straightforward.
- The activities were grouped in a logical sequence.
- "Information" was more accurately represented in the actual value-add activity.

Information Services, which had been listed as a part of Residential Energy Management and Business Energy Management, are now listed here. Elements of the individual functions that made up Information Services¹¹ are now (1) separately enumerated and (2) segregated into the following groupings.

This critical EES function will maintain a staff of eight energy advisors in the main PSE office in Bellevue with four others located in PSE's regional offices. It is anticipated that energy advisors will provide outstanding customer service in responding to over 110,000 customer inquiries in 2012-2013.

The Events team will coordinate and host approximately 200 trade shows, community gatherings, and retail functions each year in the coming biennium. As PSE's vehicle fleet transitions to smaller and more fuel-efficient autos, the Events team will purchase a van, which will be used for larger canopies, displays and other equipment that doesn't fit in the smaller vehicles. The van will serve as the storage facility for these items and will be secured in the PSE parking garage.

¹⁰ Local Infrastructure and Market Transformation is renamed Trade Ally Support in 2012.

¹¹ Former Information Services elements are: Events, Energy Advisors, Brochures, Enews and Online Tools. It is possible to reference and compare these from the Information Services budget detail sheets of the 2011 Annual Conservation Plan. PSE maintained those element headings and carried them into the 2012-2013 plan.

Energy Education, which stopped claiming savings in 2010, underwent another significant change for 2012-2013, as Schedules E202 and G207 are retired at the beginning of 2012. Energy Education will continue its relationship with Hopelink and the Independent Colleges of Washington. The program will also target English as a Second Language households.

Web Experience

In concert with the creation of the Portfolio Support heading and Customer Engagement & Education group, this activity grouping was created and reviewed with the CRAG in PSE's July 21, 2011 meeting. It is made up of activities and functions that were described in the 2010-2011 Support Activities section; Mainstreaming Green and Marketing Integration. These functions and activities are primarily focused on customers' access to EES programs through the internet and other forms of electronic and traditional media. They include managing the development of PSE's web content, analyzing customer trends, E-news, and online tools (formerly included in Information Services).

Mainstreaming Green

The complete 2012-2013 marketing plan, including those for individual programs is provided in **Exhibit 7**.

Mainstreaming Green will continue its focus on significantly improving the ability of EES to communicate the "why" and "how" of energy efficiency. We will continue the use of a unified graphic standard and our efforts to make our web tools effective in meeting customers' high expectations for ease of use.

The Mainstreaming Green team will implement the second phase of the web enhancement plan, designed to provide customers with new tools, targeted merchandising, self-service rebate processing and application transactions. There will be new capabilities, including energy use dashboards, personalized promotions, and additional multimedia content.

The **Marketing Integration** function represents staff salary expenses of employees working on Mainstreaming Green projects.

Energy Efficient Communities

Formerly titled Energy Efficient (Green) Communities, this program will continue its focus on coordinating the remaining ARRA community initiatives. It will also emphasize further community channel development to increase program participation.

Trade Ally Support

Trade Ally Support is the new name assigned to the group whose function was formerly fulfilled under the terms of Schedule 270, Local Infrastructure and Market Transformation. The former title lacked clarity of purpose, and caused confusion for

some Stakeholders. PSE will cancel Schedule 270 at the beginning of 2012.

The function was also relocated to the Portfolio Support group to more accurately represent its objectives of impacting overall EES initiatives, versus a specific program.

Trade Ally Support will continue communication with and financial support for critical program allies, including service organizations like the Consortium for Energy Efficiency, Electric League of the Pacific Northwest, Building Owners and Managers Association (BOMA), and the Northwest Energy Efficiency Council.

Marketing Research

This function was formerly named Market Research and was included with Strategic Planning in the (now retired) Support Activities group. Strategic Planning has been moved to the Research and Compliance group, which more accurately represents its objectives.

This function is more accurately included in the Portfolio Support group, as it contributes to a broad base of knowledge used by a wide variety of programs within EES. The details of the program, outlined in Exhibit 3, remain significantly the same as in prior years. The team will continue to focus on understanding customer perceptions and barriers to program participation. It will also contribute to increased integration into marketing and program planning.

Research & Compliance

PSE created the Research & Compliance grouping at the end of 2011 to provide stakeholders with a more accurate representation of activities that contribute to cost and savings calculations, planning activities, and other critical non-program specific functions. The group is made up of programs that were formerly included in the sector titled Support Activities. The functions themselves have not been changed (other than to provide refreshed descriptions) from their former versions.

Conservation Supply Curves

Conservation Supply Curves is now included in the Strategic Planning section of **Exhibit 1**, Budget Details and **Exhibit 3**, Program Details. This function develops electric and gas conservation potential assessments for the biennial IRP. The group's 2012-2013 budget includes internal PSE labor and consultant expenses to develop achievable technical potentials.

Strategic Planning

Formerly included with Market Research, Strategic Planning was separated and re-aligned into the Research & Compliance group at the end of 2011. The activities of this function are more accurately represented here, as they are used for broad EES program planning and development.

The function provides research and analyses to support IRP development, compliance filings, responses and reports, and other strategic EES initiatives.

Program Evaluation

The budget line for this function is relocated from the Support Activities group into the Research and Compliance group in 2012. 2012-2013 evaluations are detailed in **Exhibit 6**, Evaluation Plan.

The EES EM&V framework, developed by the evaluation team in collaboration with a CRAG sub-committee, is attached to the Biennial Conservation Plan as **Exhibit 8**.

The Evaluation team plans a four-year evaluation cycle that covers all programs and spending. The Evaluation budget includes a mix of external and internal studies and adds over \$1 million over 2012-2013 to achieve the required spending threshold stipulated by condition K(6)(f)(i).

Exhibit 6 describes an ongoing process for prioritizing measures and programs, as well as the four-year timetable to evaluate all EES programs, consistent with condition(6)(f)¹². PSE uses a standardized approach to program evaluations, using both internal studies performed by senior evaluation analysts, and external, independent evaluations.

¹² Figure 1 of Exhibit 6, Evaluation Plan.

The Evaluation team's toolbox consists of data analysis and file reviews, staff interviews, metering, billing analysis, customer surveys, trade ally surveys, as well as others enumerated in Exhibit 6.

The Evaluation report Response (ERR) process became a standard process for all evaluation studies in 2011. The team plans on refining and improving this process in 2012.

Program Support

This function will be relocated from the Support Activities group into the Research and Compliance group at the beginning of 2012. The function includes FTE support for biennial program planning, department-wide RFP coordination, regional support needs, programmatic M&V development and implementation support and Trade Ally Support.

Other Electric Programs

Net Metering

No changes from the current program offerings in the Net Metering program. The volume of net metering interconnection requests continues to increase each year. The program plans to add one staff member to keep pace with increasing account management requirements.

Renewable Energy Education

The number and type of renewable energy grants will be revised at the start of 2012. EES plans to phase out demonstration projects by 2013.

CI Load Control

Formerly a pilot, under terms of Schedule 249A, Commercial Load Control becomes an ongoing program under terms of Schedule 271 at the beginning of 2012. Schedule 249A will be revised to reflect that no new customers will be accepted as pilot participants. The Schedule will be left open, though, as continuing program costs will accumulate through 2012-2013.

PSE's 2011 IRP identified cost-effective peak resource potential for Demand Response. On October 12, 2011, PSE filed a draft RFP for program administration and the program is expected to deliver up to 20 MW in 2012.

2012-2013 Measures

Detailed listings of all EES measures offered for the upcoming biennium are contained in the EES List of Measures, Incentives and Eligibility, **Exhibit 4**. The document contains measures for every program, segregated by fuel type. It also contains the estimated measure lives for each measure category.

Exhibit 4 will be updated and filed with the WUTC records center on a quarterly basis at a minimum. There may be occasions when the document requires updating and re-filing on a more immediate basis, however. Cases may include, but are not limited to:

- Major program revisions (not measure revisions).
- Schedule revisions.
- Errors in incentive, eligibility, measure descriptions (different than incentive, eligibility, and description revisions).

Exhibit 5 provides lists of Residential and Business prescriptive measure savings values, both RTF and PSE deemed.

Glossary of Terms

Calculated Savings	This savings type is different than deemed values (described below). This term indicates that there is a pre-approved, stipulated input savings value (or cost) per measure. This value (or cost) is then multiplied by site-specific input values to arrive at the overall savings value (or cost). This term is used in the <u>Savings Type</u> field in Exhibit 5, List of Measures.
Channel	Within an EES Residential or Business sector, an organization that is established to focus on the value chain—consisting of manufacturer distributor, dealer, contractor to the end-use customer—with the most similar market, delivery methods and ultimate purchasers or product users.
Conditions	Also “2010 Electric conservation Settlement Agreement Terms and conditions” or “Energy Independence Act conditions”. Specific deliverables and stipulations by which the Company must operate or produce through the course of operating and managing energy efficiency programs. In addition to compliance requirements outlined in the Settlement Terms Sections A through J and L, the conditions are listed under Section K of the Agreed Conditions for Approval of Puget Sound Energy, Inc’s 2010-2011 Biennial Electric Conservation Targets Under RCW 19.285 Docket No. 100177. There are additional sections that regulate the Company’s energy efficiency operations.
Custom Savings	This savings type applies to conservation projects where a PSE EME performs specific evaluation and review of a unique customer site to determine savings values—therms or kWh—that apply only for that site. For this type of measure, there is insufficient information, the occurrence is too infrequent or it cannot be specifically defined to justify development of a Calculated or Deemed protocol.

Definitions, continued

Deemed Measure	As in a measure's deemed savings value; A savings (or cost) value that applies to a unit of specific measure, regardless of where or how the measure is installed. Measures for which it is possible to "deem" per unit energy savings, cost and load shape based on program evaluation data and engineering estimates. (For instance, one residential interior CFL lamp has a deemed value of 24 kilowatt-hours per year.) This classification applies to both RTF and PSE deemed (noted on the following page). This term has been supplanted by "UES", defined below.
Direct Benefit to Customer (DBtC)	Rebates, grants, credits or services that are of value to customers. Services can include, but aren't limited to, credits on a monthly bill, upstream incentive provided to channel partners or trade allies—either within our service territory or regionally—and free energy efficient devices available by mail.
Direct Install Measure	A conservation measure that is installed by a PSE representative—rather than a PSE customer—into a qualifying structure.
Distribution	For the purposes of Schedule 292, means electrical facilities within the State of Washington that the Company owns or operates to convey electricity from the point of generation or purchase to the point of use by a Customer. Distribution includes transmission and distribution lines related substations and transformers.
I-937	An informal reference to the 2006 voter initiative, The Washington Clean Energy Initiative. The vote resulted in the creation of RCW 19.285 and WAC 480-109, which, by law, is now referred to as the Energy Independence Act ("EIA").
Measure	A product, device, piece of equipment, system or building design or operational practice used to achieve greater energy efficiency or to promote Fuel Conversion and Fuel Switching. Unless specifically enumerated in a specific Energy Efficiency Program, all Measures, proposed by Customers or otherwise, shall meet or exceed the efficiency standards set forth in the applicable energy codes, or, where none exists, "standard industry practice" as determined by the Company. Measures will meet common construction practices, and meet industry standards for quality and energy efficiency. ¹³ Measures should also meet cost-effectiveness standards.
Program	Programs may consist of a single measure, an assortment of related measures or a suite of measures that are related strictly by delivery type or customer segment.
PSE Deemed	Relative to measure savings types (Custom, Calculated, PSE Deemed or RTF Deemed), these measures are supported by PSE engineering calculations or evaluation studies, in compliance with Settlement Agreement condition K(6)(c). This term is used in the <u>Savings Type</u> field in Appendix B, List of Measures.

¹³ Schedule 83, section 4, Definitions, #m. Schedule 183, section 4, #1.

Definitions, continued

RTF Deemed	<p>Measure savings that are deemed (now “UES”) at a per-unit level by the Regional Technical Forum (RTF). Relative to PSE savings types (Custom, Calculated, PSE Deemed or RTF Deemed), supported by RTF analyses, in compliance with Settlement Agreement condition K(6)(b).</p> <p>This term is used in the <u>Savings Type</u> field in Exhibit 5, List of Rebate Measures.</p>
Savings	<p>Savings (both gas and electric) are defined and reported as those recognized in the first year of a measure’s total expected life. PSE reports the total savings for the year that the measure was implemented, regardless of when it is installed. Electric savings are counted at the customer meter, not the busbar. Gas savings are counted at the customer gas meter.</p> <p>It is important to note that all measures have an associated life, during which the noted annual savings accumulate. Each measure has a different life, as determined by rigorous evaluation. The average measure life per program can be found in the EES Cost-Effectiveness tables in Exhibit 2 of this report. As noted above, measures have associated savings beyond the first year; those savings continue to accrue to the benefit of PSE.</p>
System	<p>In this document, System may have the following meanings:</p> <ol style="list-style-type: none"> 1) Any software program—supported by PSE’s IT department or otherwise—or physical apparatus used to record, track, compile, report, archive, audit energy savings claims or financial data. 2) Electrical, and/or gas equipment that is either attached together or works in concert to provide space conditioning, plumbing functions or other end-uses associated with structures, such as HVAC systems, pumping systems, etc.

Acronyms

AIA	American Institute of Architects
ARRA	American Recovery and Reinvestment Act
aMW	Average MegaWatt. An expression of energy (versus “power”). It is used to express very large amounts of energy. The term represents an average of power (Megawatts [MW]) used over time (the standard term being one year or 8,760 hours). Thus, 1 aMW = 8,760 MWh.
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
BOMA	Building Owners and Managers Association
BPA	Bonneville Power Administration
CHP	Combined Heat & Power
C/I	Commercial/Industrial. Also referenced as Business, when used in context of the Business Energy Management sector.
CMS	Customer Management System. A PSE proprietary software application that tracks customer activities, inventory and rebate processing.
CRAG	Conservation Resource Advisory Group
DDC	Design, Development and Construction
DHW	Domestic Hot Water
EC Motor (ECM)	Electronically Commutated Motor
EES	Energy Efficiency Services; a department of Puget Sound Energy.
EME	Energy Management Engineer
EM&V	Evaluation, Measurement and Verification
ERR	Evaluation Report Response. A form used to complete an evaluation study’s resultant actions.
GPM	Gallons Per Minute
HID	High Intensity Discharge (lamp type)
HVAC	Heating, Ventilation and Air Conditioning
kWh	Kilowatt Hour. 1,000 watt-hours = 1 kWh, which is equivalent to 10 100-watt incandescent lamps being turned on for one hour.
LED	Light Emitting Diode (lamp type)
MEF	Manufacturer’s Energy Factor (applies primarily to appliances)
MWh	Megawatt-hour. 1,000 kWh = 1 MWh
NEEA	Northwest Energy Efficiency Alliance
NEMA	National Electrical Manufacturers Association
O&M	Operations & Maintenance
RCW	Revised Code of Washington.

Acronyms, continued

RTF	Regional Technical Forum, an advisory committee and a part of the Northwest Power and Conservation Council. The RTF develops standardized protocols for verifying and evaluating conservation.
TRC	Total Resource Cost: The cost to the customer and/or other party costs to install or have installed approved Measures plus Utility Costs and minus Quantifiable Benefits (or Costs). ¹⁴
UC	Utility Cost: The Company's costs of administering programs included, but not limited to, costs associated with incentives, audits, analysis, technical review and funding specific to the Measure or program and evaluation. ¹⁵
UES	Unit Efficiency Standard, a reference to RTF's former "Deemed" measures.
ULI	Urban Land Institute
USGBC	U.S. Green Building Council
WAC	Washington Administrative Code
WAMOA	Washington Association of Maintenance and Operations Administrators
WSEC	Washington State Energy Code
WUTC	Washington Utilities and Transportation Commission

¹⁴ Schedule 83, section 4, Definitions, #z. Schedule 183, section 4, #x.

¹⁵ Schedule 83, section 4, Definitions, #bb. Schedule 183, section 4, #z.

Cumulative Ten-Year Conservation Potential

Statutory and Regulatory Requirements

RCW 19.285.040 requires that, beginning in 2010 and every two years thereafter, utilities must project their “cumulative ten-year conservation potential”, including all electric savings that are “cost-effective, reliable and feasible”. WAC 480-109-010 (1) says that this projection may be derived from either the utility’s most recent IRP or the Northwest Power and Conservation Council’s most recent regional power plan. Further guidance is provided in Condition (9)(a) of the Settlement Terms for Conservation in Docket UE-100177, which stipulates that the ten-year potential “must be based on a current conservation potential assessment study of PSE’s service area”.

As defined by WAC 480-109-007 (3), conservation is defined as “any reduction in electric power consumption” due to increased efficiency of:

- Energy Use, where PSE includes energy efficient building systems, high efficiency electric end use equipment, conversion of electric end uses to high-efficiency natural gas equipment, and high efficiency cogeneration systems to meet on-site customer load;
- Distribution, where PSE includes line phase balancing and conservation voltage reduction;
- Production, where PSE includes energy efficiency improvements at PSE electric production facilities.

The remainder of this section describes determination of the conservation potential and consistency of the company’s methodology with that of the Northwest Power and Conservation Council (hereafter referred to as the “Council”).

Identifying All Conservation Opportunities That Are Cost-Effective, Reliable, and Feasible

The ten-year cumulative conservation potential consists of the optimized level of energy use and distribution system conservation potential selected by PSE's resource portfolio model for the 2011 Integrated Resource Plan (IRP). It includes ramping the timing for achieving this potential so that all the economic achievable retrofit potential in existing buildings would be achieved in 10 years, not the full 20-year planning horizon of the IRP. In addition, PSE subsequently estimated the potential for electric energy savings from improvements to the efficiency of PSE's power generation facilities in Washington State. The methodology for deriving these potentials is explained more fully below.

The combined total of 2011 IRP potential plus production facility efficiency represents the total amount of conservation that is technically available, cost-effective, and achievable in the long run, based on the best information and analysis available. This includes all potential savings from any combination of utility programs, new codes and standards, and market transformation.

Consistency with Council Methodology

The methodology used to determine these potentials was consistent that that used by the Council to develop the 6th Northwest Power Plan. The conservation potential was built with a

bottom-up approach, using individual energy-efficient technologies applied to appropriate end uses and building types to determine technical, economic, achievable potential.

Both PSE and the Council use similar Total Resource Cost (TRC) approaches to their economic analyses. In the spring of 2011, a sub-group of the Washington State Conservation Work Group was convened to examine the methodologies of all the state's electric investor-owned utilities relative to the Council methodology (see Attachment _). That sub-group concluded that all the utilities, including PSE, were generally consistent with the Council methodology. A few minor differences in methodology were identified, but none of these had significant impacts on the results. One minor difference in the economic analysis is that PSE analyzed bundles of measures with similar costs while the Council analyzes individual measures, but this does not appear to cause significant differences in results. Another minor difference is that PSE expresses its benefits and costs in nominal terms (includes inflation) while the Council uses real terms (excludes inflation), which does not cause any difference in relative cost-effectiveness since benefits and costs are treated equally. Finally, PSE uses its own after-tax cost of capital as the discount rate for present value calculations, while the Council uses a regional discount rate that combines utilities, customers, and BPA. Again, the absolute difference in discount rates is small and does not materially affect results

Figure 1 identifies the key elements of PSE's methodology, consistent with the methodology outline of published on the [Council's website](#), except for minor differences noted above. Complete descriptions of PSE's technical and achievable potential are in [Appendix K](#) of the 2011 IRP. The derivation of the economic potential is presented in [Chapter 5](#) and [Appendix I](#) of the 2011 IRP.

**Figure 1
PSE Conservation Potential Consistency with Council Methodology**

Technical Potential	Economic Potential	Achievable Potential
<ul style="list-style-type: none"> • Wide array of technologies, applied to all customer sectors • “Applicable” units, as determined by <ul style="list-style-type: none"> ○ Building characteristics ○ Fuel & equipment saturations ○ Equipment life/turnover ○ New & existing units ○ Measure interactions & substitutions • Calibrated to customer & load forecasts for PSE service area 	<ul style="list-style-type: none"> • Economic screen uses TRC approach • Based on forecast of wholesale market prices • Energy and capacity savings shaped for time and seasonal differences • Use range of scenarios to account for uncertainty and risk • Use full incremental measure costs, plus applicable O&M and program admin. Costs • Benefits include energy, capacity, T&D losses and deferral • Non-energy benefits, 10% Power Act credit & environmental externalities included 	<ul style="list-style-type: none"> • Annual acquisition levels based on IRP portfolio modeling where conservation competes against all other resources • Discretionary & lost opportunity potentials identified • Use ramp rates that accelerate discretionary retrofit measures, with 85% maximum market penetration • Potentials are revised based on new information and market experience gained since previous IRP

Efficiency improvements at electric production facilities were not projected in the Company’s IRP. Therefore PSE developed a separate assessment of the conservation potential at its electric production facilities. This assessment included all hydro and thermal plants operated by PSE in the state of Washington. In 2009, an energy audit was conducted at each facility and efficiency improvements to all energy-consuming equipment were identified, totaling 27,224 MWh saved. It is assumed that all of this potential from production facilities is achievable in ten years and is distributed evenly across that period. Figure 2 summarizes the conservation potential for each generation plant.

Figure 2
Conservation Potential from PSE Electric Production Facilities

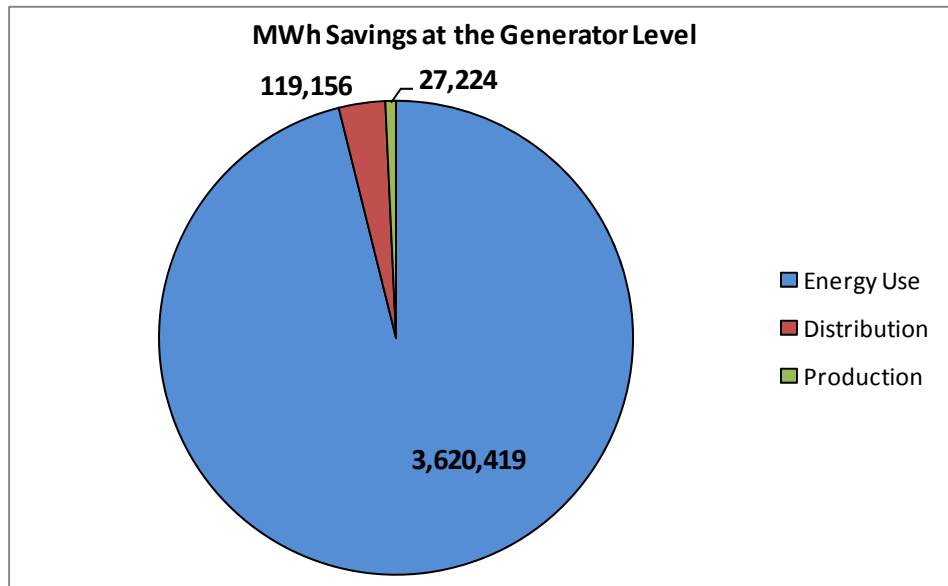
Facility	Measure	Energy Savings
Upper Baker	Lighting Upgrade	24,601 kWh
	Pumping Station Motors	45,000 kWh
	Pumping Station Transformers	51,000 kWh
	Pumping Station Controls	150,000 kWh
Lower Baker	Lighting Upgrade	59,300 kWh
Electron	Lighting Upgrade	20,061 kWh
Encogen	Lighting Upgrade	37,692 kWh
	VFD Air Compressor	127,000 kWh
Fredrickson	Lighting Upgrade	15,000 kWh
Fredonia	Lighting Upgrade	9,800 kWh
Mint Farm	Supply Gas Pressure Increase	19,000,000 kWh
	Lighting Upgrade	54,000 kWh
	Air Compressor Upgrade	77,709 kWh
	Exterior Sensors	6,900 kWh
	Cooling Tower	2,500,000 kWh
	Feedwater Pump	2,349,900 kWh
Goldendale	Lighting Upgrade	25,600 kWh
	Cooling Tower	2,520,000 kWh
	Compressed Air	35,000 kWh
Sumas	Lighting Upgrade	30,000 kWh
	Compressed Air	70,000 kWh
Whitehorn	Lighting Upgrade	15,000 kWh
Totals		27,223,563 kWh
		3.1 aMW

Total Ten-year Conservation Potential

Based on the analysis described previously, PSE's total cumulative ten-year conservation potential is 3,766,799 MWh (429.9aMW) at the generator, which includes line loss savings from the customer meter back to the power generator (consistent with conservation council's basis for reporting energy savings). Expressed in terms of energy savings at the customer meter (excluding line loss savings), the ten-year potential is 3,531,508 MWh (403.1 aMW).

Figure 3 shows how the cumulative ten-year potential breaks out by type of conservation resource. As can be seen, the vast majority (96%) of the ten-year potential comes from Energy Use Conservation. Energy Use Conservation consists of improved building shell efficiency, high-efficiency electric end use equipment and controls, and electric-to-gas customer fuel conversion.

Figure 3
PSE Cumulative Ten-Year Conservation Potential (2012-2021)



Biennial Conservation Target

Statutory and Regulatory Requirements

RCW 19.285.040 requires that, once the ten-year conservation potential has been developed, utilities shall set a biennial electric conservation acquisition target which is no lower than the utility's two-year pro rata share of its ten-year potential.

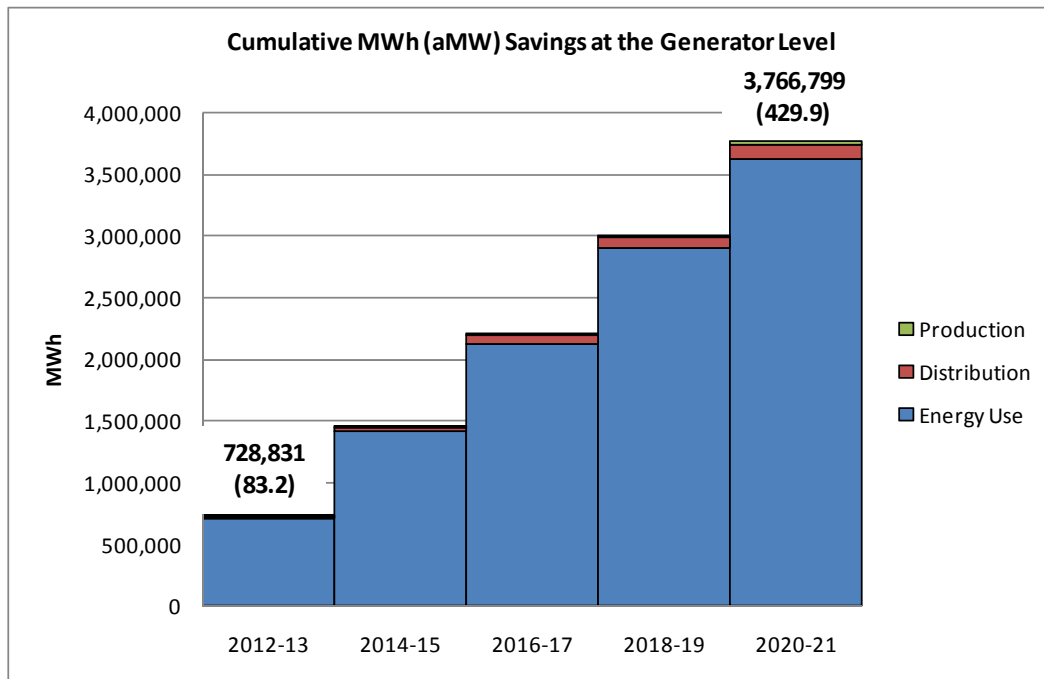
The WAC rule for setting the biennial target defines "pro rata" simply as "the calculation used to establish a minimum level for a conservation target" (WAC 480-109-007 (14)) and requires that the utility must document how the ten-year cumulative conservation potential was prorated (WAC 480-109-010 (2)).

Determination of Pro Rata Share of the Ten-Year Conservation Potential

The conservation potential in PSE's 2011 IRP assumes that all retrofit end use energy efficiency and fuel conversion potential is accelerated into a ten year period, while other types of conservation or demand-side resources are ramped in more gradually over time over natural measure life cycles or customer growth rates. This is consistent with previous IRP's and is intended as a general planning assumption to demonstrate that there is value to acquiring these resources as quickly as realistically possible, but that they cannot be acquired immediately.

The 2012 – 2013 two-year portion of the cumulative ten-year potential is 728,831 MWh (83.2 aMW) at the generator level. Figure 4 shows the cumulative savings by resource type for each biennial period over the next ten years.

Figure 4
PSE Cumulative Conservation Potential



However, not all the potential represented Figure 4 is realistically feasible to achieve through PSE-funded programs. The conservation potential includes electricity savings from all possible sources: utility programs, codes and standards, market transformation, and adoption of conservation measures outside of any programs or code requirements. Some conservation potential is therefore outside of PSE's control and ability to measure.

It is also not possible for a conservation potential assessment to fully capture all the market feasibility and uncertainty factors that can affect real-world program design and implementation. Projecting actual savings from programs is an imperfect science. The potential assessment represents the best possible estimate of achievable cost-effective savings, given the information available at that particular point in time. Assumptions are made on such things as the rate of customer replacement or adoption of a measure. Factors outside of the Company's control, such as the economy, adoption of more stringent energy efficiency codes, or introduction of a new technology, can influence whether a customer will invest in energy efficiency measures and what the baseline level of efficiency is.

Therefore, the company has made some additional pro rata adjustments to the cumulative conservation potential. These adjustments are intended to address changing market conditions, technical feasibility, timing issues, and other uncertainty factors beyond those considered in the company's conservation potential assessment. These additional factors are identified below.

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- **End Use Efficiency:** Programs that are funded and operated by PSE will not achieve all the identified conservation potential over the next ten years, as this potential includes energy savings achieved through any means. Some of this potential will be acquired through the new Washington State Energy Code and new federal appliance standards which were adopted after completion of the conservation potential assessment for the 2011 IRP. Some potential savings may also be achieved by customers acting independently, outside of any utility, state, or regional program. The federal tax credits for the purchase of certain energy-efficient equipment, which helped create a demand "bubble" for these products, have been reduced. The loss of these tax credits, coupled with slower than expected economic recovery, is expected to depress consumer spending on appliance and equipment purchases in at least the short term. PSE has sought to offset some of this downside adjustment through a Request for Proposals process in 2011 to identify and implement additional measures or market delivery mechanisms that enhance the company's existing portfolio of programs.
 - **Production Efficiency from PSE Generation Facilities:** The potential projects identified by PSE's production facility potential assessment require detailed engineering and economic feasibility studies. Implementation plans must also be developed and funding sources identified. PSE completed a more detailed feasibility analysis of the original potential assessment in 2011. This review found that lighting upgrades at most sites and a variable frequency drive upgrade at a combined-cycle plant were feasible and cost effective to implement in 2012 - 2013. Other measures in the potential assessment may be implemented in the future as existing equipment fails or after further study to verify energy savings and cost-effectiveness.
 - **Distribution System Efficiency:** As with the conservation potential from PSE generation facilities above, actual implementation of distribution efficiency projects will require detailed engineering and economic feasibility studies, implementation plans and identification of funding sources. The target for 2012 -- 2013 includes projected savings from distribution system projects based on an informal feasibility review of eligible circuits.

The total effect of these prorated adjustments on the maximum cumulative conservation potential in the 2012 – 2013 biennium is shown in Figure 5. They amount to a reduction of 2.5% from the total conservation potential in 2012 -- 2013.

Figure 5
Pro Rata Adjustments to Cumulative Conservation Potential

	Generator Level Savings (MWh)	Generator Level Savings (aMW)	Less: 6.7% Line Losses*	Meter Level Savings (MWh)	Meter Level Savings (aMW)
End Use Efficiency	703,831	80.3		659,636	75.3
Distribution Efficiency	19,555	2.2		18,327	2.1
Production Efficiency	5,445	0.6		5,445	0.6
Total 2012-13 Potential	728,831	83.2		683,407	78.0
End Use Efficiency	-10,449	-1.2		-9,793	-1.1
Distribution Efficiency	-2,513	-0.3		-2,355	-0.3
Production Efficiency	-5,260	-0.6		-5,260	-0.6
Pro Rata Adjustments	-18,221	-2.1		-17,407	-2.0
2012-13 Target	710,610	81.1		666,000	76.0

*Line losses are not applicable to production facility efficiency since they occur at the point of generation.

Biennial Conservation Target

The 2012 - 2013 biennial target, accounting for the pro rata adjustments described above, is 710,755 MWh (81.1 aMW) at the generator level. This is equivalent to 666,000 MWh (76.0 aMW) at the customer meter level (line loss adjustments excluded). The two-year target represents 18 percent of the total ten-year conservation potential. This target represents the company's pro rata share of all conservation potential available over ten years that is reliable, cost-effective, and feasible to achieve through its program efforts in the next two years.

As a point of comparison, using the Council's 6th Plan calculator (option 2), PSE's 2012-13 share would be 72.6 aMW at the generator level. This is less than the Company's target in Figure 5, which is 81.1 aMW at the generator level.

Figure 6 breaks down the target by type of conservation resource. Nearly all the target savings (98%) is expected to be achieved through end use efficiency programs. This proportion is consistent with the distribution of savings by resource type in the ten-year potential, shown previously in Figure 3.

Figure 6
2012 – 2013 Biennial Conservation Target

