



Washington Annual Report on Conservation Acquisition

January 1, 2014 – December 31, 2014

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List of Abbreviations and Acronyms

CFL Compact Fluorescent Lighting

DSM Demand-side Management

Schedule 191 Schedule 191 System Benefits Charge Adjustment

EM&V Evaluation, Measurement & Verification

EPA Environmental Protection Agency

GWh Gigawatt-hour(s)

HVAC Heating, Ventilation and Air Conditioning

IRP Integrated Resource Plan

kWh Kilowatt-hour

LEDs Light-emitting Diode

NEEA Northwest Energy Efficiency Alliance

NEF National Energy Foundation

NTG Net-to-Gross

PCT Participant Cost Test

PTRC PacifiCorp Total Resource Cost test

RIM Ratepayer Impact Measure test

SBC System Benefit Charge

SYLR See ya later, refrigerator®

TRC Total Resource Cost test

TRL Technical Resource Library

UCT Utility Cost Test

VFD Variable-Frequency Drive

Executive Summary

Pacific Power & Light Company, a division of PacifiCorp ("Company"), works with its customers to reduce the need for investment in supply side resources and infrastructure by reducing energy and peak consumption through cost-effective energy efficiency programs.

In 2014, the Company offered five energy efficiency programs in Washington approved by the Washington Utilities and Transportation Commission ("Commission"), and received energy savings and market transformation benefits through its affiliation with the Northwest Energy Efficiency Alliance ("NEEA"). The expenditures associated with these programs are recovered through the System Benefits Charge Adjustment, Schedule 191 ("Schedule 191").

This report provides details on program results and activities, expenditures, and Schedule 191 revenue for the performance period from January 1, 2014, through December 31, 2014. The Company, on behalf of its customers, invested \$11.6m in energy efficiency information, services, and incentives during the reporting period. The investment yielded approximately 55.3 gigawatt-hours ("GWh") in first year savings¹ and approximately 8.5 megawatts of energy efficiency savings related capacity reductions². Net benefits over the life of the individual measures are estimated at \$13.5m³. The cost effectiveness of the Company's Washington energy efficiency program portfolio from various perspectives is provided in Table 1.

Table 1
Cost Effectiveness for the Portfolio⁴

	B/C Ratio with NEEA	B/C Ratio without NEEA
Total Resource Test plus 10% – total resource cost with the addition of environmental and non-energy benefits ⁵	1.73	1.66
Total Resource Cost Test – effects on both participants and non-participants ⁶	1.58	1.51
Utility Cost Test – effect on customers ⁷	2.47	2.53
Participant Cost Test – effect on participants ⁸	3.10	2.84
Ratepayer Impact – effect on the cost per kilowatt-hour of sales	0.67	0.68

¹ Gross reported savings at generation.

² See Appendix 1 for explanation on how the capacity contribution savings values are calculated.

³ See Appendix 2 – Total Resource Cost Test plus 10% Net Benefits including NEEA and Non-Energy Benefits.

⁴ Ratios include NEEA's savings and Non-Energy Benefits but excludes portfolio level expenses i.e. the costs of the potential study and development of measure assumption database consistent with the Company's EM&V Framework.

⁵ The PTRC includes the 10% Northwest Regional Credit allowed in Washington.

⁶ The TRC compares the total cost of a supply side resource to the total cost of energy efficiency resources, including costs paid by the customer in excess of the program incentives. The test is used to determine if an energy efficiency program is cost effective from a total cost perspective.

⁷ The UCT compares the total cost incurred by the utility to the benefits associated with displacing or deferring supply side resources.

⁸ The PCT compares the portion of the resource paid directly by participants to the savings realized by the participants.

All cost effectiveness calculations will assume a net-to-gross ("NTG") of 1.0 consistent with the Northwest Power and Conservation Council's methodology. Annual performance information for 2014 is provided in detail in Appendix 2.

The portfolio was cost effective based on four of the five standard cost effectiveness tests for the reporting period. The ratepayer impact measure test⁹ was less than 1.0 indicating near-term upward pressure was placed on the price per kilowatt-hour given a reduction in sales.

The Company, working with its third-party program delivery administrators, ¹⁰ collaborated with the following number of retailers, contractors and vendors in the delivery of its energy efficiency programs in the state of Washington:

Table 2 **Energy Efficiency Infrastructure**

Sector	Type	No.
Residential	Lighting Retailers	20
	Appliances Retailers	17
	HVAC Contractors	58
	Weatherization Contractors	23
	Low Income Agencies	3
Commercial and Industrial	Lighting Trade Allies	55
	HVAC Trade Allies	24
	Motors Trade Allies	34
	Engineering Firms	22

⁹ The RIM examines the impact of energy efficiency expenditures on non-participating ratepayers overall. Unlike supply-side investments, energy efficiency programs reduce energy sales. Reduced energy sales can lower revenue requirements (see UCT) while putting upward pressure on rates as the remaining fixed costs are spread over fewer kilowatt-hours.

¹⁰ See program specific information for backgrounds on third party administrators.

Regulatory Activities

During the reporting period the Company requested and received Commission approval and/or submitted to regulatory or reporting entities the following:

- Initiative 937 compliance plans and reports from Order 01, Docket No. UE-111880
 - o 2013 Annual Report on Conservation Acquisition, filed March 31, 2014.
 - System Benefit Charge Adjustment increasing annual revenue by approximately \$60,000, filed May 1, 2014 in Docket No. UE-140761 requesting an effective date of July 1, 2014. On June 19, 2014 the Company filed a letter and revised tariff sheets requesting no change to the current approved rates given the small magnitude of the originally proposed rate change with an effective date of July 1, 2014.
 - o 2012-2013 Conservation Achievement and Commerce Report submitted May 30, 2014 and a revised report which corrected minor errors submitted July 1, 2014.
- Modification to Home Energy Savings Program Schedule 118, effective January 1, 2014, utilizing the program's flexible tariff and 45 day change noticing provision, no filing was required. The modifications were for alignment with the Company's 2014-2015 Business Plan, to align measures, savings, and incentives with current industry standards, and to clarify requirements for incentive application submission deadlines.
- Tariff updates to expand the Residential Refrigerator Recycling Program Schedule 107, to include all customer classes, was filed February 28, 2014 and approved effective April 1, 2014.
- Washington Conservation Hearing on July 25, 2014 in Docket UE-111880 on Pacific Power's compliance with requirements pursuant to WAS 480-109-040 and Order 01 in docket UE-111880 and to recognize the achievement of 111,923 megawatt-hours of conservation during the 2012 - 2013 biennium.
- Request filed on August 20, 2014 to expand and extend the Home Energy Reports Program. Filed a letter on August 28, 2014 to move the effective date included in the original filing from September 5, 2014 to September 12, 2014. The filing was approved September 11, 2014 with an effective date of September 12, 2014.
- Modification to Non-Residential Energy Efficiency Program Schedule 140, effective October 1, 2014, utilizing the program's flexible tariff and 45 day change noticing provision, no filing was required. Modifications included expanding the program to include an enhanced incentive offer for small business customers, updating the retrofit lighting incentive table, and other minor improvements.
- 2014-2015 Washington Business Plan Update was filed October 31, 2014 in Docket No. UE-132047. The Business Plan Update was acknowledged pursuant to the No Action Agenda during the December 30, 2014 open meeting.

Advisory Group Activities

Consistent with the conditions set forth in Docket No. UE-132047, Order 01, Paragraph 3(a), the Company seeks input regarding its energy efficiency programs from its Washington Demand-Side Management Advisory Group ("DSM Advisory Group"). This group includes

representatives from a variety of constituent organizations. The Company collaborated with its DSM Advisory Group throughout 2014 on the following matters:

February 10, 2014

- Reviewed the See ya later, refrigerator® and Home Energy Savings program evaluations;
- Provided an overview of the upcoming evaluation schedule;
- Provided a development review and requested input on the Company's Conservation Potential Assessment;
- Presented proposed changes and sought input to small business lighting offering;
- Presented proposed expansion options for the Home Energy Reports program;
- Discussed the proposed 2014 outreach plan;
- Provided miscellaneous updates on:
 - o DSM Central
 - o Business Plan Updates
 - o Savings Verification Report.

April 28, 2014

- Reviewed the 2013 Annual Report;
- Presented the May 1st System Benefits Charge analysis;
- Reviewed the preliminary verification results of the 2012-2013 Biennial Report;
- Discussed updates and requested feedback on the Company's EM&V Framework;
- Provided a status update of the evaluation, expansion, and extension of the Home Energy Reports program; sought advice and recommendation on proposed expansion;
- Provided an update and solicited feedback on the 2014 Conservation Potential Study.

July 31, 2014

- Presented the 2012-2013 Biennial Conservation Report results;
- Provided an update of EPA 111(d);
- Reviewed the Home Energy Reports Evaluation:
- Provided a status update of the Home Energy Reports Expansion;
- Reviewed Third Party Verification of Savings for 2012-2013;
- Reviewed SOW for 2014-2015 Verification of Savings;
- Presented proposal for and solicited feedback on proposed Small Business Lighting offer;
- Discussed proposed changes to the See ya later, refrigerator® program;
- Reviewed proposed methodology and solicited feedback for reporting against a frozen and floating baseline for 2014-2015 biennial period;
- Provided update on development of the 2015 Conservation Potential Assessment including review of scope of work and initial findings;
- Provided an update on EMV Framework.

October 30, 2014

- Provided a demo of TRL and DSM Central;
- Provided an update evolving EPA 111(d) learnings;
- Reviewed the Production Efficiency Work Plan and Progress Report;
- Presented and requested feedback on the proposed 2015 outreach plan;

- Presented and requested feedback on the midstream commercial LED lamp offer;
- Discussed proposed changes to the See ya later, refrigerator® program;
- Reviewed the November 1 Business Plan Update;
- Provided an updated on the 2013 IRP Action Plan;
- Discussed need to reinstate provision for the re-payment of incentives from customers that leave service;
- Provided an update on DSM organization personnel.

System Benefits Charge Balancing Account Summary

Demand-side management activities are funded through Schedule 191, the System Benefits Charge Adjustment collections. Expenditures are charged as incurred and collected through the Systems Benefit Charge. The balancing account is the mechanism used for managing the revenue collected and expenses incurred in the provision of DSM resources. As noted in the Regulatory Section of this report, the Company requested no change to the current approved rates in 2014. The balancing account activity for 2014 is outlined in Table 3. The end of year balance in the balancing account, on an accrual basis, was an under-collection of expenses of \$1.1 million (monies owed the Company).

Table 3
System Benefit Charge Balancing Account Summary

State of Washin	ngton				
SBC Summary	Balancing Acc	count			
		Schedule 191			Accrual Basis
	Deferred	Revenue	Accumulative	Monthly Net	Accumulatiive
	Expenditures	Collected	Balance	Accrued Costs	Balance
Balance as	•		(\$787,468)	\$290,118	(\$497,350)
Jan-14	\$546,882	(\$1,199,506)	(\$1,440,092)		(\$1,099,290)
Feb-14	\$553,801	(\$852,251)	(\$1,738,542)	\$91,479	(\$1,306,261)
Mar-14	\$918,815	(\$846,267)	(\$1,665,994)	\$6,846	(\$1,226,866)
Apr-14	\$546,585	(\$721,911)	(\$1,841,320)	(\$52,825)	(\$1,455,017)
May-14	\$550,919	(\$708,222)	(\$1,998,623)	\$49,038	(\$1,563,282)
Jun-14	\$1,067,563	(\$781,528)	(\$1,712,588)	(\$33,651)	(\$1,310,899)
Jul-14	\$587,135	(\$829,681)	(\$1,955,134)	\$121,941	(\$1,431,504)
Aug-14	\$716,476	(\$987,637)	(\$2,226,295)	\$209,893	(\$1,492,772)
Sep-14	\$948,745	(\$869,698)	(\$2,147,247)	\$64,255	(\$1,349,469)
Oct-14	\$799,504	(\$785,294)	(\$2,133,037)	\$25,574	(\$1,309,685)
Nov-14	\$1,190,243	(\$830,779)	(\$1,773,574)	\$62,166	(\$888,055)
Dec-14	\$2,558,602	(\$1,050,575)	(\$265,546)	\$457,509	\$1,077,481
Total 2014	\$10,985,271	(\$10,463,349)		\$1,343,028	*

^{*} December 2014 accrual

Column Explanations:

<u>Deferred Expenditures</u>: Monthly expenditures for all program activities posted in 2014, including funding for the Northwest Energy Efficiency Alliance.

Revenue Collected: Revenue collected through Schedule 191, System Benefits Charge Adjustment.

<u>Carrying Charge</u>: On July 29, 2010 in Docket UE-001457, the Commission ordered that the one-way carrying charge on negative balances (balances owing to customers) be eliminated going forward.

<u>Accumulative Balance</u>: A running total of account activities on a "cash" basis. A negative accumulative balance means cumulative revenue exceeds cumulative expenditures; positive accumulative balance means cumulative expenditures exceed cumulative revenue.

<u>Monthly Net Accrued Costs</u>: Two accrual entries are made each month for expenditures of energy efficiency programs. One estimates the incurred cost not yet processed, and the other reverses the estimate from the previous month. The amount shown here is the net of the two entries.

Accrual Basis Accumulative Balance: Current balance of account including accrued costs.

Planning Process

Integrated Resource Plan

The Company develops a biennial integrated resource plan ("IRP") as a means of balancing cost, risk, uncertainty, supply reliability/deliverability and long-run public policy goals. ¹¹ The plan presents a framework of future actions to ensure the Company continues to provide reliable, reasonable-cost service with manageable risks to the Company's customers. Energy efficiency and peak management opportunities are incorporated into the IRP based on their availability, characteristics and costs.

Energy efficiency and peak management resources are divided into four general classes:

- Class 1 DSM (Resources from fully dispatchable or scheduled firm capacity product offerings/programs) Capacity savings occur as a result of active Company control or advanced scheduling. After customers agree to participate, the timing and persistence of the load reduction is involuntary on their part within the agreed limits and parameters.
- Class 2 DSM (Resources from non-dispatchable, firm energy and capacity product offerings/programs) Sustainable energy and related capacity savings are achieved through facilitation of technological advancements in equipment, appliances, lighting and structures or sustainable verifiable changes in operating and maintenance practices, also commonly referred to as energy efficiency resources.
- Class 3 DSM (Resources from price responsive energy and capacity product offerings/programs) Short-duration energy and capacity savings from actions taken by customers voluntarily based on pricing incentives or signal.
- Class 4 DSM (Resources from energy efficiency education and non-incentive based voluntary curtailment programs/communications pleas) Energy and/or capacity reduction typically achieved from voluntary actions taken by customers to reduce costs or benefit the environment through education, communication and/or public pleas.

Class, 1, 2 and 3 DSM resources are included as resource options in the resource planning process. Class 4 DSM actions are not considered explicitly in the resource planning process, however, the impacts are captured naturally in long-term load growth patterns and forecasts.

As technical support for the IRP, a third-party demand-side resource potential assessment (Potentials Assessment) is conducted to estimate the magnitude, timing and cost of energy efficiency and peak management resources. ¹² The main focus of the Potentials Assessment is on resources with sufficient reliability characteristics that are anticipated to be technically feasible and assumed achievable during the IRP's 20-year planning horizon. The estimated achievable energy efficiency potential identified in the 2015 Potentials Assessment for Washington is 948

¹¹ Information on the Company's integrated resource planning process can be found at the following address: http://www.pacificorp.com/es/irp.html

¹² PacifiCorp Demand-Side Resource Potential Assessment For 2015-2034, http://www.pacificorp.com/es/dsm.html.

GWh by 2034, or 21 percent of projected baseline loads.¹³ By definition this is the energy efficiency potential that may be achievable to acquire during the 20-year planning horizon; prior to screening for cost-effectiveness through the Company's integrated resource planning process.

The achievable technical potential of Class 2 (energy efficiency) resources for Washington by sector is shown in Table 4. The 2015 Potentials Assessment indicates that approximately 9 percent of the achievable technical potential for the Company, excluding Oregon, is available within its Washington service area. 15

Table 4
Washington Energy Efficiency Achievable Technical Potential by Sector

	Cumulative GWh in	
Sector	2034	Percent of Baseline Sales
Residential	392	21%
Commercial	395	26%
Industrial	145	13%
Irrigation	13	9%
Street Lighting	3	30%

Demand-side resources vary in their reliability, load reduction and persistence over time. Based on the significant number of measures and resource options reviewed and evaluated in the Potentials Assessment, it is impractical to incorporate each as a stand-alone resource in the IRP. To address this issue, Class 2 DSM measures and Class 1 DSM programs are bundled by cost for modeling against competing supply-side resource options reducing the number of discrete resource options the IRP must consider to a more manageable number.

The evaluation of Class 2 DSM (energy efficiency) resources within the IRP is also informed by state-specific evaluation criteria in the development of supply-curves. While all states generally use commonly accepted cost-effectiveness tests to evaluate DSM resources, some states require variations in calculating or prioritizing the tests:

- Utah utilizes the Utility Cost Test (UCT) as the primary determination of cost effectiveness.
- Idaho, Oregon, and Washington utilize the Total Resource Cost (TRC) test and consider the inclusion of quantifiable non-energy benefits.
- Oregon and Washington, in addition to considering quantifiable non-energy benefits, apply an additional 10% benefit to account for non-quantifiable externalities, consistent with the Northwest Power Act.

Unless specified, the Total Resource Cost test is utilized as the primary determination of cost effectiveness in the resource planning process. However, the Company evaluates program implementation cost-effectiveness (both prospectively and retrospectively) under a variety of

¹⁴ Oregon energy efficiency potentials assessments are performed by the Energy Trust of Oregon.

¹³ Ibid, Volume 2, page 4-2.

¹⁵ Volume 1, Page 4-2, PacifiCorp Demand-Side Resource Potential Assessment for 2015-2034.

tests to identify the relative impact and/or value (e.g. near-term rate impact, program value to participants, etc.) to customers and the Company.

Energy Efficiency Programs

Energy efficiency programs were offered to all major customer sectors: residential, commercial, industrial and agricultural. The overall energy efficiency portfolio included five programs: *Home Energy Savings*, Schedule 118; *Home Energy Reports; Residential Refrigerator Recycling*, Schedule 107; *Low Income Weatherization*, Schedule 114; and *Non-Residential Energy Efficiency (watt*smart® *Business)*, Schedule 140. In addition to the energy efficiency programs, the Company, on behalf of customers, invested in outreach and education for the purpose of promoting the efficient use of electricity and improving program performance. Results for 2014 are provided in Table 6.

Table 6
Washington Results January 1, 2014 – December 31, 2014

washington Resu	its surraity 1	, 2011 Dec	CIIIOCI 31, 20	17	
Program	kWh/Yr Savings (at site)	kWh/Yr Savings (at generator)	aMW Savings (at gen)	Systems Benefits Charge Expenditures	
Low Income Weatherization (114)	156,456	171,585	0.02	\$	698,964
Refrigerator Recycling (107)	667,926	732,514	0.08	\$	173,384
Home Energy Savings (118)	12,757,968	13,991,663	1.60	\$	2,243,020
Home Energy Reporting	4,670,171	5,121,777	0.58	\$	274,248
Total Residential Programs	18,252,521	20,017,540	2.29	\$	3,389,616
wattsmart Business Agricultural (140)	878,485	963,434	0.11	\$	108,898
wattsmart Business Commercial (140)	9,409,037	10,305,812	1.18	\$	1,684,912
wattsmart Business Industrial (140)	15,684,832	16,964,871	1.94	\$	2,816,814
Wattsmart Business Portfolio				\$	1,180,687
Total Business Programs	25,972,354	28,234,118	3.22	\$	5,791,311
Northwest Energy Efficiency Alliance	6,400,566	7,015,950	0.80	\$	1,174,914
Total	50,625,441	55,267,608	6.31	\$	10,355,841
		School Fre	ergy Education	\$	58,260
			2.	\$	249,791
Outreach and Communication Portfolio Level Expenditures (DSM Central, evaluation, potential study & TRD)					901,637
Portfolio DSM Central - \$48,091					901,037
Portfolio Evaluation - \$786,875					
Portfolio Potential Study - \$57,029					
Port	Portfolio Technical Reference Library - \$9,642				
T	otal System Be	nefits Charge	expenditures	\$	11,565,528

The Company, consistent with requirements under Docket UE-132047, Order 01, Attachment A Paragraph (8)(b), provides Table 7 which compares the Company's 2014 Business Plan budget filed on November 1, 2013 as Appendix 7 to the 2014 Biennial Conservation Plan, to actual 2014 program performance.

In 2014, the Company delivered preliminary results of 55,267,608 kWh in first year energy savings against the 2013 business plan forecast savings of 44,936,318 kWh, a positive variance of approximately 23 percent. The largest variances from plan were due to the following:

- Higher than planned savings from Home Energy Savings program due to the *watt*smart® starter kits, and
- Higher than planned industrial sector participation.

Table 7: Washington Business Plan Budget ¹⁶ **compared to Actual** ¹⁷

	2014 PacifiCorp Washington Business Plan Budget			2014 PacifiCorp Washington DSM Actual				
Program	kWh/Yr Savings (at site)	kWh/Yr Savings (at generator)	_	Estimated Systems Benefit Expenditures	_	kWh/Yr Gross ngs Savings aMW Savings (at generator) (at gen)		Systems Benefits Charge Expenditures
Low Income Weatherization (114)	267,156	292,990	0.03	\$ 919,500	156,456	171,585	0.02	\$ 698,964
Refrigerator Recycling (107)	900,915	988,033	0.11	\$ 238,382	667,926	732,514	0.08	\$ 173,384
Home Energy Savings (118)	7,312,374	8,019,481	0.92	\$ 1,772,063	12,757,968	13,991,663	1.60	\$ 2,243,020
Home Energy Reporting (N/A)	5,078,730	5,569,843	0.64	\$ 144,000	4,670,171	5,121,777	0.58	\$ 274,248
Total Residential Programs	13,559,175	14,870,347	1.70	\$ 3,073,945	18,252,521	20,017,540	2.29	\$ 3,389,616
wattSmart Business (140) - Commercial	10,206,531	11,179,315	1.28	\$ 2,352,790	9,409,037	10,305,812	1.18	\$ 2,380,163
wattSmart Business (140) - Industrial	10,776,511	11,655,982	1.33	\$ 2,484,180	15,684,832	16,964,871	1.94	\$ 3,250,447
wattSmart Business (140) - Agricultural	126,203	138,407	0.02	\$ 29,092	878,485	963,434	0.11	\$ 160,700
Total Business Programs	21,109,245	22,973,704	2.62	\$ 4,866,062	25,972,354	28,234,118	3.22	\$ 5,791,311
Production Efficiency	3,371	3,371	0.00	\$ 962			0.00	
Northwest Energy Efficiency Alliance	6,468,181	7,088,896	0.81	\$ 1,249,843	6,400,566	7,015,950	0.80	\$ 1,174,914
Total Other Conservation Initiatives	6,471,552	7,092,267	0.81	\$ 1,250,805	6,400,566	7,015,950	0.80	\$ 1,174,914
Be wattsmart, Begin at Home	-	-	-	\$ 60,000				\$ 58,260
Customer Outreach/Communication	-	-	-	\$ 250,000				\$ 249,791
Program Evaluations	-	-	-	\$ 640,000				\$ 786,875
Potential Study Update/Analysis	-	-	-	\$ 75,000				\$ 57,029
Measure Data Documentation	-	-	-	\$ 5,200				\$ 57,733
Admin of prior programs	-	-	-	\$ 1,500				\$ -
Total Portfolio-Level Expenses	-	-	-	\$ 1,031,700				\$ 1,209,688
Total PacifiCorp Conservation	34,671,791	37,847,422	4.32	8,972,669	44,224,875	48,251,658	5.51	\$ 10,390,614
Total System Benefits Charge Conservation	41,136,601	44,932,947	5.13	10,221,550	50,625,441	55,267,608	6.31	\$ 11,565,528
Total Conservation	41,139,972	44,936,318	5.13	10,222,512	50,625,441	55,267,608	6.31	\$ 11,565,528

Budget from 2014-2015 Business Plan filed November 1, 2013
 SBC expenditures represents total program costs for savings claimed 2014

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Residential Programs

The residential energy efficiency portfolio is comprised of five programs; *Home Energy Savings*, *Home Energy Reports*, *Residential Refrigerator Recycling*, *Low Income Weatherization*, *and NEEA*. As shown in Table 8, the residential portfolio was cost effective based on four of the five standard cost effectiveness tests for the reporting period. The ratepayer impact test was less than 1.0 indicating that there is near term upward pressure placed on the price per kilowatt-hour given a reduction in sales.

Table 8
Cost Effectiveness for Residential Portfolio¹⁸

	B/C Ratio with NEEA	B/C Ratio without NEEA
Total Resource Test plus 10% – total resource cost with the addition of environmental and non-energy benefits	2.11	1.95
Total Resource Cost Test – effects on both participants and non-participants	1.93	1.78
Utility Cost Test – effect on customers	2.54	2.69
Participant Cost Test – effect on participants	4.56	3.79
Rate Payer Impact – effect on the cost per kilowatt-hour of sales	0.66	0.68

Home Energy Savings

The *Home Energy Savings* program is designed to provide access to and incentives for more efficient products and services installed or received by customers in new or existing homes, multi-family housing units or manufactured homes.

Program participation by measure for the current period is provided in Table 9.

Table 9
Eligible Program Measures (Units)

Measures	2014 Total Units	2014 kWh @ site
Air Sealing	1,242	571
New Homes Builder Option Package	68	126,412
New Home - Heat Pump	1	388
New Homes - Ductless Heat Pump	1	2,837
New Homes - Attic Insulation	1,166	70
Central Air Conditioner Equipment	39	8,897
Duct Sealing - Manufactured Homes	171	229,907
Duct Sealing	326	1,069,887
Heat Pump	184	495,743

¹⁸ Includes NEEA savings and Non-Energy Benefits

Measures	2014 Total Units	2014 kWh @ site
Ductless Heat Pump	106	372,379
Electric Water Heater	165	22,086
Heat Pump Water Heater	31	31,065
Clothes Washer	264	38,190
Dishwasher	46	1,821
Freezer	44	1,405
Refrigerator	105	5,955
Evaporative Cooler	5	3,477
Insulation - Attic	375,125	325,571
Insulation - Floor	36,480	78,855
Insulation - Wall	32,802	62,519
Windows	22,597	12,980
Light Fixture	6,403	313,572
CFL Bulbs	274,565	4,519,782
LED Bulbs	28,125	734,959
wattsmart® Starter Kits	12,357	4,298,641
Grand Total	792,418	12,757,968

Program cost-effectiveness results for 2014 are provided in Table 10.

Table 10 Cost Effectiveness for Home Energy Savings¹⁹

	B/C Ratio
Total Resource Test plus 10% – total resource cost with the addition of environmental and non-energy benefits	2.31
Total Resource Cost Test – effects on both participants and non-participants	2.10
Utility Cost Test – effect on customers	3.74
Participant Cost Test – effect on participants	3.29
Rate Payer Impact – effect on the cost per kilowatt-hour of sales	0.74

Program Management

The program manager who is responsible for the program in Washington is also responsible for the *Home Energy Savings* program in California, Idaho, Utah, and Wyoming and the *New Homes* program in Utah. For each program and in each state the program manager is responsible for the cost effectiveness of the program, identifying and contracting with the program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set out in the tariff and/or posted on the Company's website.

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¹⁹ Includes Non-Energy Benefits

Program Administration

The Home Energy Savings program is administered by CLEAResult.

CLEAResult is responsible for the following:

- Retailer and trade ally engagement CLEAResult identifies, recruits, supports and assists
 retailers to increase the sale of energy efficient lighting, appliances and electronics.
 CLEAResult enters into promotion agreements with each lighting manufacturer and
 retailer for the promotion of discounted CFL and LED bulbs. The agreements include
 specific retail locations, lighting products receiving incentives and not-to-exceed annual
 budgets. Weatherization and HVAC trade allies engaged with the program are provided
 with program materials, training, and regular updates.
- Inspections CLEAResult recruits and hires inspectors to verify on an on-going basis the installation of measures. A summary of the inspection process is in Appendix 3.
- Incentive processing and call-center operations CLEAResult receives all requests for incentives, determines whether the applications are completed, works directly with customers when information is incorrect and/or missing from the application and processes the application for payment.
- Program specific customer communication and outreach A summary of the communication and outreach conducted by CLEAResult on behalf of the Company is outlined in the Communication, Outreach, and Education section.

Infrastructure

The total number of participating retailers participating in the program is currently 34. The current count of participating retailers by measure group is provided in the Table 11. Detail of participating retailers is available in Appendix 6.

Table 11 Participating Retailers²⁰

Lighting Retailers	Appliance Retailers	HVAC Contractors	Weatherization
20	17	58	23

Program Changes

In 2014, the *Home Energy Savings* program was modified to include:

- wattsmart® Starter Kits with ENERGY STAR® lighting and WaterSense® products, depending on the customers' water heating type.
- Direct install duct sealing for customers in manufactured homes with forced air electric furnaces.
- Added incentives for comprehensive whole home upgrades including heating and cooling systems, air sealing, insulation, duct sealing and duct insulation.

²⁰ Some retailers/contractors may participate in the promotion of more than one measure group so the count of unique participating firms is less than the total count provide above.

• Realigned incentives for new homes to a whole home performance approach.

Evaluation

In January 2014, a process and impact evaluation was completed by a third party evaluator for program years 2011-2012. The primary objective of the evaluation report is to determine the extent to which participants in the Home Energy Savings program reduced their energy consumption due to the program. Secondary objectives are to report on customer satisfaction, program awareness and motivations for participation in the program. The results of the evaluation can be viewed at www.pacificorp.com/es/dsm/washington.html. The Company's response to the recommendations and web link to the evaluation report are included in Appendix 4.

Home Energy Reports

The *Home Energy Report* program is designed to better inform residential customers about their energy usage by providing comparative energy usage data for similar homes located in the same geographical area. In addition, the report provides the customer with information on how to decrease their energy usage. Equipped with this information, customers can modify behavior and/or make structural equipment, lighting or appliance changes to reduce their overall electric energy consumption.

Reports were initially provided to approximately 13,500 customers; however this number has decreased due to customer attrition from general customer churn (customer move-outs)²¹ and customers requesting to be removed from the program. In 2014, program changes were approved extending the program time period through December 2017 and expanding the program to 38,500²² additional customers. These customers received their initial reports in October 2014. An additional expansion of 6,626 customers was added in January 2015 to offset attrition and lower energy savings than expected from the initial pilot group.

Monthly reports are mailed to all new program participants for the initial three months in order to build program awareness. Following this initial three month period, report frequency is moved to a bi-monthly schedule for the remainder of the program. All participating customers may request an electronic version delivered via email and have access to a web portal containing the same information about their usage and past usage provided in the report. The web portal also contains other functions such as a home energy audit tool, the ability for customers to update their home profile (for more accurate comparisons) and suggestions on more ways to save energy around their home.

Program savings by group for January 1, 2014 – December 31, 2014 is provided in Table 12.

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offset expected attrition.

²¹ As of the end of 2014 approximately 10,800 customers were still participating and receiving home energy reports.
²² An expansion group of 35,000 customers was approved, but the program expansion was for 38,500 customers to

Table 12 Program Savings

Home Energy Reports Group	2014 kWh
	@ site
Original Pilot Group	4,324,956
October 2014 Expansion Group	345,215
Total	4,670,171

Program performance results for the current period are provided in Table 13.

Table 13
Cost Effectiveness for Home Energy Reporting

	B/C Ratio Combined	B/C Ratio Initial Pilot Group	B/C Ratio October 2014 Expansion Group
Total Resource Test plus 10% – total resource cost with the addition of environmental and non-energy benefits	1.23	2.26	0.18
Total Resource Cost Test – effects on both participants and non-participants	1.12	2.06	0.17
Utility Cost Test – effect on customers	1.12	2.06	0.17
Participant Cost Test – effect on participants	NA	NA	NA
Rate Payer Impact – effect on the cost per kilowatt-hour of sales	0.45	0.56	0.14

Program Management

The program manager overseeing program activity in Washington is also responsible for the *Home Energy Reports* program in Idaho, Utah, and Wyoming as well as the *See ya later, refrigerator*® program in Washington, California, Idaho, Utah and Wyoming. For each program and in each state the program manager is responsible for the cost effectiveness of the program, identifying and contracting with the program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set in each state's compliance requirements.

Program Administration

The *Home Energy Reports* program is administered by Opower. Opower's software creates individualized energy reports for utility customers that analyze their energy usage and offers recommendations on how to save energy and money by making small changes to their energy consumption. The Company contracts with Opower to provide energy savings, software services, and printing and delivery of energy reports to customers.

Opower is responsible for the following:

• Selecting Qualifying Customers – Opower conducts an analysis to identify qualifying customers. An independent, third party administrator then randomly assigns qualifying

- customers into the program's treatment (those who will receive reports) and control groups (for measurement and verification).
- Customer Comparison Analysis Opower conducts statistical analysis to perform pattern recognition in order to derive actionable insights to selected customers.
- Energy Report Delivery By mail and/or email.
- Web Portal Design and Support Opower operates and maintains a customer Web portal that participants may visit for additional information about their energy usage and saving opportunities.

Evaluation

In June 2014, a process and impact evaluation was completed by a third party evaluator for the period of August 1, 2012 – January 31, 2014. The primary objective of the evaluation report was to determine the extent to which participants in the Home Energy Reports program reduced their energy consumption due to the program. Secondary objectives are to report on customer satisfaction with the program, and on behavioral and information effects of the program. The results of the evaluation can be viewed at www.pacificorp.com/es/dsm/washington.html. The Company's response to the recommendations and web link to the evaluation report are included in Appendix 4.

Refrigerator Recycling

The *Refrigerator Recycling*²³ ("See ya later, refrigerator®") program is designed to decrease electricity use (kWh) through voluntary removal and recycling of inefficient refrigerators and freezers. Participants receive a \$30 incentive for each qualifying refrigerator or freezer recycled through the program and an energy-saving kit which includes two CFLs, a refrigerator thermometer card, energy-savings educational materials, and information on other efficiency programs relevant to residential customers. In the second quarter, the program was expanded to include pickups from business customers and retailers.

Program participation by measure for the current period is provided in Table 14.

Table 14
Eligible Program Measures (Units)

Measures	2014 Total	2014 kWh
	Units	@ site
Refrigerator Recycling	893	522,452
Freezer Recycling	236	116,820
Energy Savings Kit	1,016	28,654
Total	2,145	667,926

Program performance results for January 1, 2014 – December 31, 2014 are provided in the Table 15.

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 $^{^{23}}$ Also known as "See ya later, refrigerator®" ("SYLR")

Table 15
Cost Effectiveness for Refrigerator Recycling

	B/C Ratio
Total Resource Test plus 10% – total resource cost with the addition of	1.66
environmental and non-energy benefits	1.00
Total Resource Cost Test – effects on both participants and non-participants	1.51
Utility Cost Test – effect on customers	1.51
Participant Cost Test – effect on participants	N/A
Rate Payer Impact – effect on the cost per kilowatt-hour of sales	0.52

In 2014, more than 70 tons (141,125 pounds) of steel, 2 tons (5,645 pounds) of aluminum and copper, 11 tons (22,508 pounds) of plastics were recycled as a result of the program, reducing landfill deposits by an amount sufficient to cover an entire football field more than two and a half feet deep. In addition, the chlorofluorocarbons (greenhouse gases) collected and destroyed during recycling equates to approximately 3.6 tons (4,113 metric tons for 1,129 units) of carbon dioxide equivalents per unit, equivalent to the annual emissions of the average car in the U.S.

Program Management

The program manager responsible for the program in Washington is also responsible for the *Refrigerator Recycling* program in California, Idaho, Utah and Wyoming and the *Home Energy Reports* program in Washington, Idaho, Utah, and Wyoming. For each program and in each state the program manager is responsible for the cost effectiveness of the program, identifying and contracting with the program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set out in the tariff.

Program Administration

The *Refrigerator Recycling* program is administered by JACO Environmental ("JACO"). JACO is one of the largest recyclers of household appliances in the United States. The Company contracts with JACO to provide customer scheduling, pick-up, incentive processing and marketing services for the *See ya later, refrigerator*® program.

JACO's process ensures that over 95 percent of the components and materials of the discarded appliance are either recycled for beneficial uses or eliminated in an environmentally responsible way. The remaining 5 percent can then be productively used as "fluff" to facilitate the decomposition of biodegradable landfill material.

JACO is responsible for the following:

• Appliance Pick-up - JACO handles all customer and field service operations for the program including pick-up of refrigerators and freezers from customers and transporting the units to the de-manufacturing facility.

- Incentive processing and call-center operations Customer service calls, pick-up scheduling and incentive processing.
- Program specific customer communication and outreach Working in close coordination
 with the Company, JACO handles all the marketing for the program. The program is
 marketed through bill inserts, customer newsletters and TV, newspaper and online
 advertising.

As part of the program control process, the Company contracts with a third-party independent inspector to conduct ongoing oversight of the program's appliance recycling process, from verification that the units being recycled meet the program eligibility criteria to verifying they are being recycled and that the program records are accurate. A summary of the inspection process is included in Appendix 3.

Infrastructure

Refrigerators and freezers collected through the program are trucked to a JACO facility in Everett, Washington, for disassembly and recycling.

Evaluation

No program evaluation activities occurred during 2014.

Low Income Weatherization

The *Low Income Weatherization* program is designed to leverage funds with state and federal grants so that the energy efficiency improvements provided can be delivered to income eligible households at no cost.

Total homes treated under the program in 2014, as well as the type and frequency of specific energy efficiency measures installed in each home, is provided in Table 16.

Table 16
Eligible Program Measures (Units)

	2014 Total
Participation – Total # of Completed/Treated Homes	107
Number of Homes Receiving Specific Measures	
Aerators	81
Attic Ventilation	41
Caulk/Weather-stripping	81
Ceiling Insulation	67
Compact Fluorescent Light bulbs	105
Duct Insulation	50
Floor Insulation	99
Fluorescent Light Fixture	19
Ground Cover	74

Infiltration	107
Repairs	44
Replacement Refrigerators	8
Showerheads	85
Timed Thermostat	28
Wall Insulation	31
Water Heater Replacement	2
Water Pipe Insulation and Sealing	74

Program performance results for January 1, 2014 – December 31, 2014, are provided in Table 17.

Table 17
Cost Effectiveness for Low Income Weatherization with Non Energy Benefits

	B/C Ratio
Total Resource Test plus 10% – total resource cost with the addition of environmental and non-energy benefits	1.06
Total Resource Cost Test – effects on both participants and non-participants	1.03
Utility Cost Test – effect on customers	0.24
Participant Cost Test – effect on participants	NA
Rate Payer Impact – effect on the cost per kilowatt-hour of sales	0.18

Program Management

The program manager overseeing program activity in Washington is also responsible for the *Low Income Weatherization* programs in California, Idaho, Utah, and Wyoming; the bill discount programs in Washington, California, and Utah; and energy assistance programs in Washington, California, Idaho, Oregon, Utah, and Wyoming. For each program and in each state, the program manager is responsible for the cost effectiveness of the energy efficiency programs, partnerships, and agreements in place with local agencies that serve income eligible households, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set out in the tariff.

Program Administration

The Company partners with three local non-profit agencies to provide weatherization services to income-qualifying households throughout its Washington service territory. These agencies include Blue Mountain Action Council located in Walla Walla, Northwest Community Action Center in Toppenish, and Opportunities Industrialization Center of Washington in Yakima. The leveraging of Company funding along with Washington Match Maker Program funds allows the agencies to provide these energy efficiency services to more households at no cost to participating customers. The Company provides rebates to partnering agencies for 50 percent of the cost of services while Match Maker funds are available, and will cover 100 percent of costs when these state funds are depleted. In 2014, 90 homes were funded at 50 percent and 17 at 100 percent. Participants qualify if they are homeowners or renters residing in single-family homes, manufactured homes, or apartments. Over 7,200 homes have been completed since the program's inception in the mid-1980s.

By contract with the Company, the agencies are responsible for the following:

- Income Verification Agencies determine participants are income eligible based on Washington Department of Commerce guidelines. Households interested in obtaining weatherization services apply through the agencies. The 2014 income guidelines can be viewed at www.commerce.wa.gov/Documents/HIP-Weatherization-2014-WA-Eligibility-Guidelines.pdf.
- Energy Audit Agencies use a U.S. Department of Energy approved audit tool or priority list to determine the cost effective measures to install in the participant's homes (audit results must indicate a savings to investment ratio of 1.0 or greater).
- Installation of Measures Agencies install the energy efficiency measures.
- Post Inspections Agencies inspect 100 percent of completed homes. A sample of 5 -10 percent are inspected by a Pacific Power inspector. See Appendix 3 for verification summary.
- Billing Notification Agencies are required to submit a billing to Company within 90 days after job completion. A homeowner agreement and invoice form indicating the measures installed and associated cost is submitted on each completed home.

Evaluation

During 2014, a process and impact evaluation was in the process of being completed by a third party evaluator for program years 2012-2013. The evaluation results will be available in 2015.

Northwest Energy Efficiency Alliance

The *Northwest Energy Efficiency* Alliance ("NEEA") is a non-profit corporation supported by, and working in collaboration with, the Bonneville Power Administration, Energy Trust of Oregon, and more than 100 Northwest utilities (including Pacific Power).

NEEA works in collaboration with its funders and other strategic market partners to accelerate the innovation and adoption of energy-efficient products, services, and practices.

For the 2010-2014 funding cycle, NEEA and the region strove to achieve 200 aMW²⁴ of total regional savings. PacifiCorp's Washington funding of NEEA's work represented 3.04 percent of the region's funding; approximately \$5.7 million over the five year period with expected savings attributed to PacifiCorp's Washington service area of roughly 6 aMW²⁵.

Program performance for 2014 is being reported based on NEEA's preliminary results for Pacific Power of 7,016 megawatt hours²⁶ for the Company's funding investment of \$1.17m. Consistent with the reporting convention approved in Docket UE-132047, the savings represent

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²⁴ Northwest Energy Efficiency Alliance 2010-2014 Business Plan, April, 2009, http://neea.org/docs/marketing-tookits/neea-business-plan-2010-2014.pdf?sfvrsn=2. This is in addition to the estimated 750 aMW of total regional savings expected to be delivered during the same period of time as a result of prior market transformation investments made in NEEA.

²⁵ 3.04 percent of 200 aMW total regional savings target for 2010-2014, actual results may vary.

²⁶ At generation

Pacific Power's portion of Total Regional Savings less the Company's local program savings (adjustment to total movement in the market baseline for measures impacted by NEEA's efforts to account for savings already captured and reported through Pacific Power's Washington programs).

Program Administration

The Company has a representative on the NEEA board of directors as well as representatives on each of the sector advisory committees, residential, commercial and industrial. The Company also has representation on NEEA's broader Regional Portfolio Advisory Committee and participants in the regional Northwest Research Group. Collectively the representatives work collaboratively with the other funders, advisory group members, and NEEA to direct the efforts of NEEA in the best interest of the region in the achievement of the region's market transformation objectives.

Non-Residential Energy Efficiency

The commercial and industrial energy efficiency program portfolio was consolidated into a single *Non-Residential Energy Efficiency* program, Schedule 140, which became effective January 1, 2014. The programs that were consolidated were FinAnswer Express and Energy FinAnswer. The *Non-Residential Energy Efficiency* program is promoted to the Company's customers as *watt*smart® Business.

Projects completed in the current period by customer sector are provided in Table 18.

Table 18
Projects Completed

Sector	2014 Total
Commercial	30
Industrial	290
Agricultural	57
Total Projects Completed	377

Program participation by measure group in the current period is provided in Table 19.

Table 19
Participation by Measure Group

Measure Groups	2014Total	2014 Totals
	Count by	kWh Savings
	Measure Group	(at site)
Additional Measures	5	1,519,883
Building Shell	13	189,444
Compressed Air	18	1,022,146
Dairy Farm Equipment	2	69,440
Energy Management	1	539,546
Fast Acting Doors	6	210,162
Food Services	13	28,436
HVAC	35	2,512,837
Irrigation	60	818,086
Lighting	1,169	9,745,683
Motors	17	482,249
Office Equipment	1	110,322
Refrigeration	61	8,724,120
Program Totals	1,401	25,972,354

Program performance results for January 1, 2014 – December 31, 2014 are provided in Table 20 below.

Table 20 Cost Effectiveness for Non-Residential Energy Efficiency

	Benefit/Cost
	Ratio
Total Resource Test plus 10 percent	1.70
Total Resource Cost Test	1.54
Utility Cost Test	2.94
Participant Cost Test	2.48
Rate Payer Impact	0.71

The program is intended to maximize the efficient utilization of electricity for new and existing non-residential loads through the installation of energy efficiency measures and energy management protocols. Qualifying measures are any measures which, when installed in an eligible facility, result in verifiable electric energy efficiency improvements.

Services offered through the *Non-Residential Energy Efficiency* program are:

- Typical Upgrades: Provides incentives for lighting, HVAC, compressed air and other equipment upgrades that increase electrical energy efficiency and exceed code requirements.
- Custom analysis: Offers energy analysis studies and services for more complex projects.
- Energy management: Provides expert facility and process analysis to help lower energy costs by optimizing customer's energy use. (This offer was added in January 2014.)
- Energy project manager co-funding: Available to customers who can commit to an annual goal of completing energy projects resulting in at least 1,000,000 kWh/year in energy savings. (This offer was added in January 2014.)
- Paid Commissioning: Helps customers (and the Company) verify the energy savings associated with the efficiency upgrades and/or changes in operations.

Program Management

The program managers overseeing program activity in Washington are also responsible for the business energy efficiency programs in California, Idaho, Utah, and Wyoming. For each state the program managers are responsible for the cost effectiveness of the program, identifying and contracting with the program administrators through a competitive bid process, program marketing, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions of the program.

Program Administration

Typical measure work within the program is primarily marketed through local trade allies who receive support from one of two program delivery contractors. The Company contracts with Nexant, Inc. ("Nexant") and Cascade Energy ("Cascade") for trade ally coordination, training, application processing services and direct customer outreach for commercial and industrial/agricultural measures respectively.

Nexant and Cascade are responsible for the following:

- Trade ally engagement includes identification, recruiting, training, supporting and assisting trade allies to increase sales and installation of energy efficient equipment at qualifying business customer facilities.
- Incentive processing and administrative support includes handling incoming inquiries as assigned, processing incentive applications, developing and maintaining standardized analysis tools and providing program design services, evaluation and regulatory support upon request.
- Direct customer outreach and project facilitation for smaller customer projects
- Inspections includes verifying on an on-going basis the installation of measures. Summary of the inspection process is in Appendix 3.

Project work requiring custom analysis is primarily administered by the Company using in-house project managers and a network of energy engineering consultants.

Infrastructure

To help increase and improve the supplier and installation contractor infrastructure for energy-efficient equipment and services, the Company established and developed trade ally networks for lighting, HVAC and motors/VFDs. This work includes identifying and recruiting trade allies, providing program and technical training and providing sales support on an ongoing basis. The current list of the trade allies who have applied and been approved as participating vendors are posted on the Company website and is included as Appendix 6 to this report. In most cases, customers are not required to select a vendor from these lists to receive an incentive.

The total number of participating trade allies is currently 76. The current counts of participating trade allies by technology are in the Table 21.

Table 21
Participating Trade Allies²⁷

Lighting trade allies	HVAC trade allies	Motors and VFD trade allies
55	24	34

Given the diversity of the non-residential customers served by the Company, a pre-approved, pre-contracted group of engineering firms are used to perform facility specific energy efficiency analysis, quality assurance and verification services. Each customer's project is directly managed by one of the Company's in-house project managers. The project manager works directly with the customer or through the appropriate Company account manager located in Washington. Table 26 lists the engineering firms currently under contract with the Company.

Table 22 Energy Engineering Firms

Energy Engineering Firm	Main Office Location
Abacus Resource Management Company	Beaverton, OR
Brendle Group	Fort Collins, CO
Cascade Energy Engineering	Cedar Hills, UT
Compression Engineering Corp	Salt Lake City, UT
Ecova	Portland, OR
EMP2, Inc	Richland, VA
Energy Resource Integration, LLC	Sausalito, CA
Energy and Resource Solutions	North Andover, MA
EnerNOC Inc.	Portland, OR
EnSave, Incorporated	Richmond, VT
ETC Group, Incorporated	Salt Lake City, UT
Evergreen Consulting Group	Beaverton, OR
Fazio Engineering	Weston, OR
kW Engineering, Inc.	Salt Lake City, UT
Lincus Incorporated	Tempe, AZ
Nexant, Incorporated	Salt Lake City, UT
QEI Energy Management, Inc.	Beaverton, OR
RM Energy Consulting	Pleasant Grove, UT
Rick Rumsey, LLC	Ammon, ID
SBW Consulting, Inc.	Bellevue, WA
Solarc Architecture & Engineering, Inc.	Eugene, OR
Triple Point Energy	Portland, OR

Program Changes

On October 1, 2014 a new Small Business Lighting incentive offer became effective for customers. This program offers enhanced incentives for up to 80 percent of the cost of lighting upgrades, and is available to small business customers on approved rate schedules. Approved

²⁷ Some trade allies may participate in more than one technology so the count of unique participating firms is less than the total count provided above.

Small Business lighting contractors are the primary means of marketing the incentive offer using a variety of approaches including door-to-door and co-branded marketing materials.

Evaluation

During 2014, an independent third-party process and impact evaluation of the Company's non-residential programs for program years 2012-2013 was in the process of being completed. The results of this evaluation work will be available in 2015.

Communications, Outreach and Education

The Company utilizes earned media, customer communications, paid media and program specific media in an effort to communicate the value of energy efficiency, provide information regarding low-cost, no-cost energy efficiency measures, and to educate customers on the availability of technical assistance, services, and incentives. The overall goal is to engage customers in reducing their energy usage through behavioral changes as well as changes in equipment, appliances and structures.

Earned Media

Earned media is managed by the Company's external communications department in cooperation with the regional community managers located in Washington. "Earned media" generally refers to favorable television, radio, newspaper, or internet news coverage gained through press releases, media events, opinion pieces, story pitches, or other communication with news editors and reporters.

Customer Communications

As part of the Company's regular communications to its customers, newsletters across all customer classes promote energy efficiency initiatives and case studies on a regular basis. Inserts and outer envelopes featuring energy efficiency messages have also been used on a consistent basis. In 2014, the Company issued two newsletters focused entirely on seasonal energy efficiency information (in the fall and spring).

The Company uses its website and social media, such as Twitter and Facebook to communicate and engage customers on DSM offers and incentives.

Paid Media/wattsmart campaign

In 2014 the Company continued with the multi-faceted campaign with programs aimed at specific customer groups, but all share the common theme: Pacific Power wants to help you save money and energy by being *watt*smart*. This communication campaign aims to create awareness of the importance of being energy efficient, and to help increase participation in the Company's DSM programs.

Based on 2014 customer awareness campaign research conducted by Marketing Decisions Corporation:

- Thirty-five percent of customers surveyed in 2014 in Washington are aware that the Company offers energy efficiency programs.
- Top recalled messages: using energy wisely and energy efficiency programs
- Three in ten customers report having taken action based on the Company's advertising (31 percent). The most frequently mentioned actions:
 - o Purchased/switched to energy-efficient appliances/lights

- o Turning off lights/appliances when not in use
- o More aware of power usage
- o Enlisting in utility incentive/rebate program

Key strategies with this plan, keeping objectives and budgets in the forefront included:

- Implementing an advertising campaign featuring *watt*smart[®] energy efficiency messaging.
- Promoting customer conservation (behavioral changes) and increasing participation and savings through the Company's *watt*smart® DSM programs.
- Motivating customers to reduce consumption independently or to do so by participating in at least one of the Company's *watt*smart® DSM programs.
- Educating customers on how these programs can help them save money on their utility bills, reduce energy consumption, and keep costs down for all customers in Washington.

The *watt*smart® advertising campaign is comprised of a multi-media mix designed to reach as many customers as possible with the greatest frequency. Various communications channels were utilized to optimize effectiveness, frequency and coverage and to build on the messages. Table 23 outlines the media channels used, the value of each channel, and the impressions achieved to date.

Table 23 2014 Media Channels

Communication Channel	Value to Communication Portfolio	2014 Placements
Television	Television has the broadest reach and works	Rotation of advertisements
	as the most effective media channel	Both 30 and 15 seconds
		spots.
		2,424 placements
		5,637,100 impressions
Radio	Given the cost relative to television, radio	Rotation of advertisements
	builds on communications delivered via	1,183 placements
	television while providing for increased	2,030,900 impressions
N	frequency of messages	45.1
Newspaper/Magazine	Supports broadcast messages and	45 placements 443,594 impressions
	with broadcast	2.572.600: : 1
Online advertising		3,573,600 impressions and 191,421 search
Website	Summents all other forms of communications	impressions bewattsmart.com
	Supports all other forms of communications by serving as a source for detailed	
www.pacificpower.net	information regarding the Company's	39,493 page views (April 17 - December 31, 201)
Promote <i>bewattsmart.com</i> in	program and other energy efficiency	17 - December 31, 201)
advertising, is our energy efficiency opportunities program and other energy efficiency		
landing page.	opportunities	
Twitter @PacificPower_WA	Awareness for early adopters regarding	518 followers through
I witter wit actifier ower_wa	energy efficiency tips	December 2014
	Tweets posted on a weekly basis	December 2014
i e e e e e e e e e e e e e e e e e e e	1 weeks posted on a weekly basis	

Communication Channel Value to Communication Portfolio		2014 Placements
Facebook	Awareness for early adopters regarding	12,254 fans through
www.facebook.com/pacificpower.watts	energy efficiency tips and a location to	December 2014
mart	share information	

The total number impressions for the campaign in 2014 were 11,876,615.

Links to the Company's current portfolio of advertisements is included in Appendix 7.

The audiences for these messages were prioritized as follows:

- Primary: Households in Pacific Power's service area
- Secondary: Small and large business in Pacific Power's service area

Program Specific

All energy efficiency program communications are branded under the *watt*smart® umbrella to reinforce the campaign and to link changes in behavior to actions customers can take by participating in specific programs. Separate marketing activities administered by and specific to the programs ran in conjunction with the *watt*smart® campaign in 2014.

Home Energy Savings

The *Home Energy Savings* program communicates to customers, retailers and trade allies through a variety of channels. Three main areas of focus in 2014 included new incentive offerings, website enhancements and the new *watt*smart® Starter Kit offering for customers.

In January, communications focused on incentive increases and new incentives for measures such as duct sealing, ductless heat pumps, heat pump conversion, heat pump water heater and whole-home upgrade package.

Program website enhancements in April improved navigation, streamlined content and made it easier for customers on mobile devices and tablets to find information and apply for incentives.

In June, the program launched the *watt*smart® Starter Kits in Washington. These kits come with ENERGY STAR® lighting and WaterSense® products, depending on the customers' water heating type. Customer communications for the kits included direct mail, email, website, social media, newsletters and bill inserts.



Other bill inserts, newsletter articles, social media and website content throughout the year focused on measures such as insulation and evaporative coolers.

In July and September, a small group of targeted customers living in manufactured homes received a mailing with information on free duct sealing offered through a local participating trade ally.

The program ran ads on Facebook toward the end of the year to promote specially priced CFLs (4 CFLs for \$1). This effort generated 81,000 impressions.



Residential Refrigerator Recycling

The Company promotes the See ya later, refrigerator® program through informational television and digital display advertisements and other customer communications. In 2014, the program garnered 1,133,355 impressions. Breakdown of impressions by media type is shown in Table 24.

The Company developed a new creative campaign with a magic theme to highlight the convenience of having your old fridge recycled. For maximum exposure, these same messages and artwork were used in digital advertising, social media, website, bill inserts and newsletter articles.



Table 24
See ya later, refrigerator® Program

Communications Channel	2014 Impressions	
TV	301,000	
Digital Display	832,355	

Home Energy Reports

In October 2014, the Company expanded its Home Energy Reports program to reach an additional 38,500 customers in Washington. Many of these customers also receive email reports with customized energy-saving tips.

Existing Home Energy Report participants received a door hanger in the fall report with a reminder to set their thermostats to 68 degrees.

A sample report is included in Appendix 7.



wattsmart® Business

In 2014, customer communications and outreach supported *watt*smart® Business utilizing radio, print, paid digital search advertising, direct mail, email and social media. This was in addition to customer direct contact by Company project managers and regional community managers, as well as trade ally partners; articles in the Company newsletters and content on the Company's website.

During 2014, radio communications encouraged business customers to make energy efficiency upgrades and print ads featured case study examples from program participants which were repurposed in social media. Quarterly eblasts and digital search ads directed viewers to the company's website²⁸. Targeted direct mail was sent to irrigation customers to encourage irrigation retrofits. In 2014, the program garnered 2,045,138 impressions. Breakdown of impressions by media type is shown in Table 25.

Table 25 wattsmart® Business

Communications Channel	2014 Impressions
Radio	1,234,540
Newspaper	608,924
Magazine	143,800
Digital Paid Search	55,277
Irrigation Direct Mail	2,597

Energy Education in Schools

The Company offers a *watt*smart® Schools education program through the National Energy Foundation ("NEF"). The program is designed to develop a culture of energy efficiency among teachers, students, and families. The centerpiece is a series of one hour presentations with handson, large group activities for 4th and 5th grade students. Teachers are provided instructional materials for use in their classrooms, and students are sent home with a Household Report Card to explore energy use in their homes and to encourage efficient behaviors.

In 2014, NEF conducted presentations in Washington schools in the fall.

• Between October 13 and November 14, 2014, the program met its outreach goals of reaching 3,970 students and 155 teachers in 50 schools with 65.69 percent of "Household Report Cards", which are used as part of a home energy audit activity, completed and returned.

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²⁸ www.pacificpower.net/wasave

Evaluations

Evaluations are performed by independent external evaluators to validate energy and demand savings derived from the Company's energy efficiency programs. Industry best practices are adopted by the Company with regards to principles of operation, methodologies, evaluation methods, definitions of terms, and protocols including those outlined in the National Action Plan for Energy Efficiency Program Impact Evaluation and the California Evaluation Framework guides.

A component of the overall evaluation effort is aimed at the reasonable verification of installations of energy efficient measures and associated documentation through review of documentation, surveys and/or ongoing onsite inspections.

Verification of the potential to achieve savings involves regular inspection and commissioning of equipment. The Company engages in programmatic verification activities, including inspections, quality assurance reviews, and tracking checks and balances as part of routine program implementation and may rely upon these practices in the verification of installation information for the purposes of savings verifications in advance of more formal impact evaluation results. A summary of the inspection process is included in Appendix 3.

Evaluation, measurement and verification tasks are segregated within the Company to ensure they are performed and managed by personnel who are not directly responsible for program management.

Information on evaluation activities completed or in progress during 2014 is summarized in the chart below. Summary of the recommendations are provided in Appendix 4. The evaluation report is available at www.pacificorp.com/es/dsm/washington.html

Program / Activities	Years Evaluated	Evaluator	Progress Status
Home Energy Savings	2011-2012	The Cadmus Group	Completed
Home Energy Reporting	8/1/2012 - 1/31/2014	Navigant Consulting	Completed
Low Income Weatherization	2011-2012	Smith and Lehmann	Q2 of 2015
FinAnswer Express	2012-2013	Navigant Consulting	Q2 of 2015
Energy FinAnswer	2012-2013	Navigant Consulting	Q2 of 2015