



Idaho Energy Efficiency and Peak Reduction Annual Report

January 1, 2015 – December 31, 2015

Issued April 29, 2016



Let's turn the answers on.



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LIST OF ABBREVIATIONS AND ACRONYMS

CFL	Compact Fluorescent Lighting
CAPAI	Community Action Partnership Association of Idaho
DSM	Demand-Side Management
EICAP	Eastern Idaho Community Action Plan
GWh	Gigawatt-hour
HVAC	Heating, Ventilation and Air Conditioning
IDHW	Idaho Department of Health and Welfare
IRP	Integrated Resource Plan
kWh	Kilowatt hour
LED	Light-emitting Diode
LIHEAP	Low Income Home Energy Assistance
MW	Megawatt
PCT	Participant Cost Test
PTRC	Total Resource Cost Test with 10 percent adder
RIM	Ratepayer Impact Measure Test
Schedule 191	Customer Efficiency Services Rate
SEICAA	SouthEastern Idaho Community Action Agency
TRC	Total Resource Cost Test
UCT	Utility Cost Test
VFD	Variable Frequency Drive

EXECUTIVE SUMMARY

PacifiCorp dba Rocky Mountain Power (“Company”) is a multi-jurisdictional electric utility providing retail service to customers in California, Idaho, Oregon, Utah, Washington, and Wyoming. Rocky Mountain Power serves approximately 76,750 customers in southeastern Idaho.

The Company, working in partnership with its retail customers and with the approval of the Idaho Public Utilities Commission (“Commission”), acquires energy efficiency and peak reduction resources as cost-effective alternatives to the acquisition of supply-side resources. These resources assist the Company in efficiently addressing load growth and contribute to the Company’s ability to meet system peak requirements. Company energy efficiency and peak reduction programs provide participating Idaho customers with tools that enable them to reduce or assist in the management of their energy usage while reducing the overall costs to the Company’s customers. These resources are relied upon in resource planning as a least cost alternative to supply-side resources.

This report provides details on program results, activities, expenditures, and the current status of the DSM Tariff Rider, Customer Efficiency Service Charge - Schedule 191 (“Schedule 191”) for the reporting period from January 1, 2015, through December 31, 2015. The Company, on behalf of its customers, invested \$4.2 million in energy efficiency resource acquisitions during the reporting period. The investment yielded approximately 15.7 gigawatt-hours (“GWh”) in first year savings¹ and approximately 3.4 megawatts (“MW”) of capacity reduction from energy efficiency.² Net benefits based on the projected value of the energy efficiency program savings over the life of the individual measures are estimated at \$1.8 million³.

Overall, portfolio savings increased by 38 percent from 2014 levels, from 12.7 GWh compared to the acquisition of 15.7 GWh in 2015. Total portfolio expenditures increased by 32 percent from \$3.2 million in 2014 to \$4.2 million in 2015.

The Commission ordered that the costs for the Idaho irrigation load control program should be system allocated. Therefore, these costs are not recovered through Schedule 191. Additional information on the irrigation load control program is provided later in this report.

The energy efficiency portfolio was cost effective based on four of five standard cost effectiveness tests for the reporting period. The ratepayer impact measure test was less than 1.0, indicating near-term upward pressure was placed on the price per kilowatt-hour given a reduction in sales. Table 1 provides the cost effectiveness of the energy efficiency portfolio.

¹ Reported savings at site.

² See Planning section for explanation on how the capacity contribution savings values are calculated.

³ See Table 1 – Utility Cost Test Net Benefits.

Table 1
Cost Effectiveness Energy Efficiency Portfolio (includes non-energy benefits)

	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent ("PTRC") ⁴	1.40	\$2,355,100
Total Resource Cost Test ("TRC") ⁵	1.29	\$1,746,042
Utility Cost Test ("UCT") ⁶	1.44	\$1,851,983
Participant Cost Test ("PCT") ⁷	3.07	\$9,648,428
Ratepayer Impact Test ("RIM") ⁸	0.49	(\$6,434,846)

Portfolio-level cost effectiveness includes portfolio costs such as the Potential Assessment and DSM system database. Sector-level cost effectiveness, reported in the Residential and Non-Residential sections of this document includes sector-specific expenditures including EM&V (evaluation, measurement and verification), marketing, program administrative and development expenditures. The Company includes quantifiable non-energy benefits at the portfolio and residential level, as well as the Home Energy Savings and Low Income Weatherization program level. Appendix 1 provides 2015 cost effectiveness performance.

On November 13, 2014, the Commission approved the consolidation of Electric Service Schedule No. 140, Non-Residential Energy Efficiency and canceled Electric Service Schedules: No. 115 - FinAnswer Express; No. 125 – Energy FinAnswer; and No. 155 – Agricultural Energy Services. This report consolidates the Non-residential program results into one program hereafter referred to as *wattsmart* Business.

The Company, working with its third-party delivery administrators⁹ collaborates with the following number of retailers, contractors, and vendors in the delivery of its energy efficiency programs in the state of Idaho. Table 2 shows the number of retailers, contractors and vendors by measure type.

Table 2
Energy Efficiency Infrastructure

Sector	Type	No.
Residential	Upstream Retailers	19
	Downstream Retailers	23
	HVAC Contractors	20
	Plumbing Contractors	12
	Weatherization Trade Allies	22

⁴ The PTRC plus 10 percent includes a benefit adder to account for non-quantified environmental and non-energy benefits of conservation resources over supply-side alternatives.

⁵ 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.

⁶ The UCT compares the total cost incurred by the utility to the benefits associated with displacing or deferring supply-side resources.

⁷ The PCT compares the resource paid directly by participants to the savings realized by the participants.

⁸ The RIM examines the impact of energy efficiency on utility rates. Unlike supply-side investments, energy efficiency programs reduce energy sales. Reduced energy sales lowers revenues putting upward pressure on rates as the remaining fixed costs are spread over fewer kilowatt-hours.

⁹ See program specific sections for backgrounds on third-party administrators.

Commercial and Industrial	Lighting Trade Allies	83
	HVAC Trade Allies	42
	Motors & VFD Trade Allies	46
	Engineering Firms	22

REGULATORY ACTIVITIES

During the 2015 reporting period the Company filed a number of compliance and/or informational reports, updates and requests with the Commission in support of Company Demand-side Management (“DSM”) programs. The following is a list of those filings:

- Consistent with the flexible tariff process¹⁰ for the *wattsmart* Business program approved in Order No. 32594, a notice of changes to the program was posted on the program website¹¹ April 1, 2015, 45 days prior to going into effect on May 16, 2015. Program changes were intended to 1) clarify that energy efficiency incentives may be adjusted such that participants do not receive more than 100% of energy efficiency measure costs in total incentives from *wattsmart* Business and the Environmental Quality Incentives Program, 2) make clarifications regarding new construction and major renovation lighting projects, and 3) update small air conditioner and heat pump measures to align with updated federal standards.
- On April 30, 2015, pursuant to Order No. 29976, the Company submitted its 2014 Idaho Energy Efficiency and Peak Reduction Annual Report.
- On November 19, 2015, the Company’s 2016 *wattsmart* Communications, Education and Outreach Plan was shared with Idaho Staff for review and comment.
- On December 3, 2015, the Company filed Advice No. 15-05 requesting approval to suspend the See ya later, refrigerator® appliance recycling program administered through Schedule 117, due to the Company’s program administrator going out of business. The Commission approved the request in Order No. 33497.
- Consistent with the flexible tariff change process for the Home Energy Savings program, approved in Order No. 29976 in Case No. PAC-E-05-10, a notice of changes to the program was posted on the program website¹² December 16, 2015, 45 days prior to going into effect on January 30, 2016. Program changes were designed to 1) improve customer participation, 2) comply with changes to codes and standards, 3) align incentives with changing measure costs and savings estimates, and 4) add measures for new manufactured home construction.

¹⁰ See Direct Testimony of Nancy Goddard pp. 16-18 and Attachment C in Case No. PAC-E-12-10.

¹¹ <http://www.rockymountainpower.net/wattsmart>

¹² <http://www.homeenergysavings.net/Idaho>

Meetings with Idaho Public Utilities Commission Staff (“Idaho Staff”)

The Company consulted with Idaho Staff throughout 2015, with formal presentations on the following matters:

March 19, 2015

- Reviewed Idaho Staff’s recommendations from 2010-2013 DSM prudency review;
- Presented and reviewed marketing plan for commercial and industrial (“C&I”) customers;
- Reviewed results from 2015 Conservation Potential Assessment;
- Reviewed results from 2015 IRP Preferred Portfolio and State Implementation Plans;
- Discussed opportunities with commercial Midstream LED Lighting;
- Reviewed Commercial Building Benchmarking Software to be offered in 2015;
- Reviewed New Homes measures to be added to the Home Energy Savings Program;
- Provided update on Home Energy Reports including participation, media coverage and future plans;
- Provided an overview of completed program evaluations and schedule for future evaluations; and
- Provided overview of DSM Account Balance.

December 16, 2015

- Reviewed Company’s DSM Organization updates;
- Provided Appliance Recycling overview and updates;
- Discussed 2016 Idaho Strategic Plan including forecasted savings and program strategies;
- Reviewed Schedule 191 Surcharge Analysis;
- Discussed DSM Memorandum of Understanding Status; and
- Presented upcoming Regulatory Filings.

DSM EXPENDITURES

In Case Number PAC-E-05-10, approved in Order No. 29976, the Commission allowed the recovery of all DSM program costs through Schedule 191, with exception of the expenses associated with the irrigation load control program.¹³ Schedule 191 charges appear as a line item on customer bills. The Company books eligible DSM program costs as incurred to the balancing account.

Schedule 191 balancing account activity for 2015 is outlined in Table 3.

Table 3
Schedule 191 Balancing Account Activity

Month	Monthly Program Cost - Fixed Assets	Monthly Net Accrued Costs *	Rate Recovery	Carrying Charge	Cash Basis Accumulated Balance	Accrual Basis Accumulated Balance
Dec-14					\$ (154,871)	\$ 347,975
Jan-15	\$ 196,397	\$ (31,425)	\$ (256,901)	\$ (154)	\$ (215,529)	\$ 255,892
Feb-15	\$ 419,568	\$ (75,285)	\$ (222,120)	\$ (97)	\$ (18,178)	\$ 377,959
Mar-15	\$ 411,785	\$ (373)	\$ (200,202)	\$ 73	\$ 193,478	\$ 589,242
Apr-15	\$ 580,982	\$ (225,671)	\$ (207,514)	\$ 317	\$ 567,263	\$ 737,356
May-15	\$ 203,541	\$ 223,405	\$ (310,098)	\$ 428	\$ 461,134	\$ 854,632
Jun-15	\$ 486,112	\$ (122,743)	\$ (378,575)	\$ 429	\$ 569,100	\$ 839,855
Jul-15	\$ 246,092	\$ 56,391	\$ (628,494)	\$ 315	\$ 187,013	\$ 514,159
Aug-15	\$ 342,460	\$ 97,403	\$ (434,222)	\$ 118	\$ 95,369	\$ 519,918
Sep-15	\$ 451,406	\$ (21,308)	\$ (419,729)	\$ 93	\$ 127,139	\$ 530,379
Oct-15	\$ 355,845	\$ (56,342)	\$ (277,156)	\$ 139	\$ 205,966	\$ 552,865
Nov-15	\$ 348,534	\$ (54,443)	\$ (235,459)	\$ 219	\$ 319,261	\$ 611,717
Dec-15	\$ 352,648	\$ 15,300	\$ (265,280)	\$ 302	\$ 406,931	\$ 714,687
2015 Totals	\$ 4,395,370	\$ (195,090)	\$ (3,835,750)	\$ 2,182		

Column Explanations:

Monthly Program Costs: Monthly expenditures for all energy efficiency program activities.

Monthly Net Accrued Costs: Monthly net change of program costs incurred during the period not yet posted.

Rate Recovery: Revenue collected through Schedule 191.

Carrying Charge: Monthly “interest” charge based on “Cash Basis Accumulated Balance” of the account. The current “interest rate” for the Accumulated Balance is 1 percent per year.

Cash Basis Accumulated Balance: A running total of account activities. A negative accumulative balance means cumulative revenue exceeds cumulative expenditures; positive accumulative balance means cumulative expenditures exceed cumulative revenue.

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

¹³ Commission Order No. 32196, in Case No. PAC-E-10-07, ruled that costs associated with the Idaho Irrigation Load Control Program should be system allocated and not situs assigned to Idaho customers. The Commission recommended the Company treat the benefits of the program as a system resource for cost recovery purposes.

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.¹⁴ 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 are dispatched 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 repeatable and predictable voluntary actions by customers to manage the energy use at their facility or home, 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 signals.
- Class 4 DSM (resources from non-incented behavioral-based savings achieved through broad energy education and communication efforts) – 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.¹⁵ 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 Idaho is 468

¹⁴ Information on the Company’s integrated resource planning process can be found at the following address: <http://www.pacificorp.com/es/irp.html>

¹⁵ PacifiCorp Demand-Side Resource Potential Assessment for 2015-2034: <http://www.pacificorp.com/es/dsm.html>.

gigawatt hours (GWh) by 2034, or 20 percent of projected baseline loads.¹⁶ 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 Idaho by sector is shown in Table 4. The 2015 Potentials Assessment indicates that approximately 4 percent of the achievable technical potential for the Company, excluding Oregon,¹⁷ is available within its Idaho service area.¹⁸

Table 4
Idaho Energy Efficiency Achievable Technical Potential by Sector

Sector	Cumulative GWh in 2034	Percent of Baseline Sales
Residential	184	21%
Commercial	195	29%
Industrial	33	12%
Irrigation	54	10%
Street Lighting	1	34%

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:

- Idaho, Oregon, and Washington utilize the TRC test and consider the inclusion of quantifiable non-energy benefits.
- Utah utilizes the UCT as the primary determination of cost effectiveness.
- 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.
- Wyoming and California utilize the standard TRC test excluding quantifiable non-energy benefits and the 10% benefit adder Oregon and Washington consider.

¹⁶ Ibid, Volume 2, page 4-2.

¹⁷ Oregon energy efficiency potentials assessments are performed by the Energy Trust of Oregon.

¹⁸ Volume 1, Page 4-2, PacifiCorp Demand-Side Resource Potential Assessment for 2015-2034.

The Company evaluates program implementation cost-effectiveness (both prospectively and retrospectively) under a variety of 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.

Estimated Peak Contributions

The reported capacity reduction of 3.41 MW (at generation) for energy efficiency programs during 2015 represents the estimated MW impact of the energy efficiency portfolio during PacifiCorp's system peak period. An energy-to-capacity conversion factor developed from Class 2 DSM selections in the 2015 IRP is used to translate 2015 energy savings to estimated demand reduction during the system peak. The utilization of this factor in the MW calculation assumes that the energy efficiency resources acquired through the Company's programs have the same average load profile as those energy efficiency resources selected in the 2015 IRP. Utilization of this factor in determining the MW contribution of energy efficiency programs for 2015 is detailed in Table 5 below.

Table 5
Estimated Peak Contribution

Description	Value
First year energy efficiency program MWh savings acquired during 2015	17,414
Conversion factor: Coincident MW/MWh	0.000196
Estimated coincident peak MW contribution of 2015 Idaho energy efficiency acquisitions	3.41

ENERGY EFFICIENCY PROGRAMS

Energy efficiency programs are offered to all major customer sectors: residential, commercial, industrial and agricultural. The overall energy efficiency portfolio included five programs: *Home Energy Savings* – Schedule 118, *Residential Refrigerator Recycling* – Schedule 117, *Low Income Weatherization* – Schedule 21, *Home Energy Reports*, and *wattsmart Business* – Schedule 140. Overall, portfolio savings increased 38 percent from 2014. Program savings and cost results for 2015 are provided in Table 6 below¹⁹.

Table 6
Idaho Program Results for January 1, 2015 – December 31, 2015²⁰

Program	kWh/Yr Savings (at site)	kWh/Yr Savings (at generator)	Program Expenditures
Low Income Weatherization	68,016	75,815	\$ 255,653
Refrigerator Recycling	807,020	899,508	\$ 116,537
Home Energy Reporting	3,460,567	3,857,356	\$ 104,657
Home Energy Savings	3,801,426	4,237,298	\$ 694,685
Total Residential	8,137,029	9,069,976	\$ 1,171,532
wattsmart Business	7,554,665	8,344,079	\$ 2,565,574
Total Energy Efficiency	15,691,694	17,414,055	\$ 3,737,106
Commercial & Industrial Evaluation Costs			\$ 184,448
Residential Evaluation Costs			\$ 116,371
Low Income Energy Conservation Education			\$ 25,000
Outreach & Communications			\$ 152,615
Potential Study			\$ 6,014
Technical Reference Library			\$ 3,776
DSM Central			\$ 13,270
Total System benefit Expenditures - All Programs			\$ 4,238,600

See Appendix 2 for breakdown of program expenditures by category.

¹⁹The energy efficiency measure report is provided in Appendix 7.

²⁰ The values at generation include line losses between the customer site and the generation source. The Company's line losses by sector for 2015 are 11.47 percent for residential, 10.75 percent for commercial, 7.52 percent for industrial and 11.45 percent for irrigation.

RESIDENTIAL PROGRAMS

The residential energy efficiency portfolio is comprised of four programs: *Home Energy Savings*, *Home Energy Reports*, *Residential Refrigerator Recycling*, and *Low Income Weatherization*. As shown in Table 7, the residential portfolio was cost effective based on four of the five standard cost effectiveness tests for the 2015 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 7
Cost Effectiveness for Residential Portfolio (Including Non-Energy Benefits)

	Benefit/Cost Ratio	Net Benefits
Total Resource Test plus 10 percent	2.24	\$1,911,069
Total Resource Cost Test	2.13	\$1,741,675
Utility Cost Test	1.29	\$381,040
Participant Cost Test	8.54	\$5,506,327
Ratepayer Impact Test	0.37	(\$2,854,984)

Total Residential savings increased by 46 percent, from 5,569,109 kWh in 2014 to 8,137,029 kWh in 2015. Individual program performance, program management and program infrastructure is provided on the following pages.

HOME ENERGY SAVINGS PROGRAM

The *Home Energy Savings* program provides incentives for more efficient products and services installed or received by customers in new or existing homes, multi-family housing units or manufactured homes for residential customers under Electric Service Schedules 1 or 36. Landlords who own property where the tenant is billed under Electric Service Schedules 1 or 36 also qualify for the program. Program participation by measure category is provided in Table 8.

Table 8
Eligible Program Measures (Units)

Measure Category	kWh/Yr Savings @ Site	Total Incentive	Measure Quantity
Appliances	12,313	\$ 5,590	114
Building Shell	23,912	\$ 10,010	16,859 (sq ft)
Electronics	7,770	\$ 3,885	259
Energy Kits	1,015,442	\$ 32,029	2,460
HVAC	784,460	\$ 110,644	272
Lighting	1,954,442	\$ 153,167	105,304
Water Heating	3,087	\$ 1,000	13
Total	3,801,426	\$ 316,326	

The program was cost effective as shown in Table 9.

Table 9
Cost Effectiveness for Home Energy Savings Program (includes non-energy benefits)

	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent	3.28	\$2,095,448
Total Resource Cost Test	3.13	\$1,963,376
Utility Cost Test	1.90	\$626,038
Participant Cost Test	6.85	\$4,271,630
Rate Payer Impact Cost Test	0.42	(\$1,861,249)

Program Management

The program manager who is responsible for the *Home Energy Savings* program in Idaho is also responsible for the program in 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.

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.
- Managing savings acquisition to targets within budget.
- Continual improvement of program operations and customer satisfaction.
- 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 of this report.

The contract for *Home Energy Savings* program administration services for all states expires in early 2016. As a result, the Company initiated a request for proposal in 2015. A new contract will be in place in early 2016.

Infrastructure

The total number of retailers participating in the program is currently 108. Detail of participating retailers by delivery channel and measure type is available in Appendix 4.

Program Changes

The Home Energy Savings program made numerous changes to existing measures in its flexible tariff filing. The updated changes were made to better align with current market practices. The

program also added new offerings to expand to the new manufactured home construction market. These changes were intended to increase participation for high performance, Energy Star and eco-rated new manufactured homes. Notice of program changes were posted on the program website December 16, 2015, with an effective date of January 30, 2016.

Evaluation

A process and impact evaluation for program years 2013-2014 is currently being conducted by a third party evaluator.

HOME ENERGY REPORTS PROGRAM

The *Home Energy Reports* program is a behavioral program designed to decrease participant energy usage by providing comparative energy usage data for similar homes located in the same geographical area. Additionally, the report provides the participant with information on how to decrease their energy usage. Equipped with this information, participants can modify behavior and/or make structural equipment, lighting or appliance modifications to reduce their overall electric energy consumption.

In 2015, the program had total kWh savings of 3,460,567 kWh. Program cost effectiveness is provided in Table 10.

Table 10
Cost Effectiveness for Home Energy Reports Program

	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent	1.86	\$90,195
Total Resource Cost Test	1.69	\$72,481
Utility Cost Test	1.69	\$72,481
Participant Cost Test	N/A	\$369,558
Ratepayer Impact Cost Test	0.37	(\$297,077)

Reports were initially provided to approximately 17,600 customers in December 2014. The number of participant's decreases over time due to customer attrition related to general customer churn (customer move-outs) and customers requesting to be removed from the program. Since inception of the program, only 0.6% of customers have requested to be removed from the program. As of December 2015, 15,900 customers were active recipients of Home Energy Reports. In 2015, 93 total customers opted out of the program.

All new participants receive mailed monthly reports for the initial three months in order to build program awareness. Following this initial three month period, report frequency is reduced to a bi-monthly schedule for the remainder of the treatment period.

In 2015, reports were sent on a bi-monthly schedule until August 23rd. An analysis was performed to determine the impact on savings persistence by reducing the frequency of the reports. It was determined there was no impact to savings. As a result, the Company resumed the reports in January 2016 on a quarterly cadence.

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 provided in the report. In addition, all Idaho customers (including non-participants) have access to the web portal which contains other benefits such as a home energy audit tool, the ability for customers to update their home profile (for more accurate comparisons), and suggestions on ways to save energy.

Program Management

The program manager who is responsible for the *Home Energy Reports* program in Idaho is also responsible for the program in Utah and Wyoming as well as *Irrigation Load Control* and *Cool Keeper* programs 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 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 that are then randomly selected 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. Opower uses information about customers' homes (e.g., size, heat type, home type) to find similar homes for comparison.
- Energy Report Delivery – By mail or email.
- Web Portal Design and Support – Opower operates and maintains a customer Web portal for participants to visit for additional information about their energy usage and saving opportunities.

Evaluation

Process and impact evaluation will be performed in 2017 after there is two years of data is available.

REFRIGERATOR RECYCLING PROGRAM

The *Refrigerator Recycling* program, also known as “*See ya later, refrigerator®*,” was designed to decrease electricity use through the voluntary removal and recycling of inefficient refrigerators and freezers. The appliances had a minimum size requirement of 10 cubic feet and a maximum of 32 cubic feet. Participants received a \$50 incentive for each qualifying refrigerator or freezer recycled through the program and an energy-saving kit that included two CFLs, a refrigerator thermometer card, energy-savings educational materials, and information on other efficiency programs relevant to residential, commercial and industrial customers. The program was available to residential, business customers and retailers. Participating retailers received an incentive of up to \$20 for each qualifying refrigerator or freezer picked up.

Program participation by measure is provided in Table 11.

Table 11
Program Participation - Measures (Units)

Measures	Total kWh/Yr Savings @ Site	Total Incentive	Measure Quantity
Energy Savings Kit	21,101	\$ 4,146	698
Energy Savings Kit (business)	121	\$ 24	4
Freezer Recycling	180,775	\$ 8,750	175
Refrigerator Recycling	598,892	\$ 29,300	586
Refrigerator Recycling (business)	6,132	\$ 300	6
Total	807,020	\$ 42,520	1,469

The program was not cost effective in 2015 with a calculated TRC of 0.91. This change in cost effectiveness from 2014 is largely due to the reduction in decrement values from the 2015 IRP.²¹ Results are provided in Table 12.

Table 12
Cost Effectiveness for Refrigerator Recycling

	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent	1.00	(\$300)
Total Resource Cost Test	0.91	(\$10,867)
Utility Cost Test	0.91	(\$10,867)
Participant Cost Test ²²	N/A	\$539,008
Ratepayer Impact Test	0.27	(\$279,271)

²¹ Decrement values represent the value of saved energy for assessing benefits from the PTRC, TRC, UCT, and RIM perspectives at the measure category, program, and/or portfolio level. The values, and methodology used to develop them, are presented in PacifiCorp 2015 Class 2 DSM Decrement Study: http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Demand_Side_Management/2015/2015_Class_2_DSM_Decrement_Study.pdf

²² Participants in *See ya later, refrigerator®* program incurred no costs.

In 2015, more than 1.7 million pounds of metal, 271,000 pounds of plastics, and 32,400 pounds of tempered glass were recycled. In addition, the capture, recovery or destruction of more than 15,000 pounds of ozone depleting Chlorofluorocarbons (greenhouse gases), Hydrofluorocarbons, and Hydrochlorofluorocarbons, commonly used in refrigerants and foam insulation equates to more than 32,500 metric tons of carbon dioxide avoided.

Program Management

The program manager responsible for the *Refrigerator Recycling* program in Idaho was also responsible for the program in Utah and Wyoming. For each program and in each state the program manager was 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.

In Q4 2014, the program manager identified media placement expenditures were not allocated correctly to JACO. Accordingly, JACO issued a credit to the program in 2015 which was allocated to all states based upon the percentage of media expenditures incurred.

Program Administration

The *Refrigerator Recycling* program was administered by JACO Environmental (“JACO”) in 2015. JACO was one of the largest recyclers of house-hold appliances in the United States until going out of business in the fourth quarter of 2015. The Company contracted with JACO to provide customer scheduling, pick-up, incentive processing and marketing services for the *See ya later, refrigerator* program.

JACO’s process ensured that over 95 percent of the components and materials of a discarded appliance were either recycled for beneficial uses or eliminated in an environmentally responsible way. The remaining 5 percent could then be productively used as “fluff” to facilitate the decomposition of biodegradable landfill material.

JACO was responsible for the following:

- Appliance Pick-up – JACO handled all customer and field service operations for the program, including pick-up of refrigerators and freezers from customers and transporting 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 handled all the marketing for the program. The program was marketed through bill inserts, customer newsletters and TV, newspaper and online advertising.

As part of the program control process, the Company contracted with third-party independent inspectors to conduct ongoing oversight of the program's appliance recycling process, from verification that the units being recycled met the program eligibility criteria to verifying they were being recycled and that the program records were accurate.

A summary of the inspection process is included in Appendix 3.

Infrastructure

A crew from Salt Lake City, Utah, picked up units collected through the program in Idaho and transported the units to a JACO facility in Salt Lake City, Utah for disassembly and recycling.

Program Changes

On November 19, 2015, the Company was notified by JACO that they entered into a voluntary receivership, but customer pickups would continue. On November 21, the Company was notified pickups were canceled due to complications with transferring the receivership. On November 23, the Company was verbally notified that operations had ceased, and received formal correspondence confirming this on November 24. The Company immediately posted this information on the program web site and used another vendor to contact the affected customers to inform them their pickup was canceled. Initial data indicated this impacted 8 Idaho customers. The Company also learned that JACO's bank accounts had been closed impacting the cashing of checks and customers who were recent participants would experience delays in receiving their checks.

On November 23, 2015, the Company notified Idaho Staff of the recent developments with JACO, the unavailability of the program offer, and the Company's plan to make a filing requesting approval to suspend the appliance recycling offer and allow time to evaluate the options for this program.

Due to JACO closing its bank account the Company developed a process to pay outstanding incentives and any bank fees incurred by customers. The process was communicated to affected customers on December 9, 2015.

During December 2015, the Company began an expedited sole source procurement process to contract for remedial or "clean-up" appliance recycling services. This provider would contact customers who had pick-ups scheduled with JACO that were canceled in late November and December and, if the customer was still interested, offer the same removal service and incentive. A contract with Appliance Recycling Centers of America was executed December 30, 2015, and customer outreach began in January 2016. On December 3, 2015, the Company filed a request with the Commission to suspend the program.

Evaluation

A process and impact evaluation was conducted by a third party evaluator in 2015. A final evaluation has not been published as of the date of this Annual Report.

LOW INCOME WEATHERIZATION PROGRAM

The *Low Income Weatherization* program provides energy efficiency services through a partnership between the Company and local non-profit agencies to residential customers who meet income-eligible guidelines. Services are at no cost to the program participants.

Total homes treated under the program in 2015, as well as the type and frequency of specific energy efficiency measures installed in each home, is provided in Table 13.

Table 13
Homes Receiving Specific Measures

Participation – Total # of Completed/Treated Homes	53
Number of Homes Receiving Specific Measures	
Attic Ventilation	21
Ceiling Insulation	27
Compact Fluorescent Light Bulbs	49
Duct Insulation	10
Floor Insulation	21
Furnace Repair	29
Health & Safety Measures	30
Infiltration	44
Refrigerators	8
Replacement Windows	39
Thermal Doors	33
Wall Insulation	5
Water Heater Repair	9
Water Heater Replacement	1
Water Pipe Insulation	49

The *Low Income Weatherization* program was not cost effective in 2015, with a calculated PTRC of 0.48. The most recent Low Income Weatherization evaluation (program years 2010-2012) calculated a PTRC of 1.34²³ (including non-energy benefits). This significant change in cost effectiveness is largely due to the reduction in decrement values calculated for the 2015 IRP.²⁴ Further, the number of homes served and measures installed decreased by approximately 45 percent where program cost only decreased by 11 percent. The Company will continue to monitor program savings and participation going forward. Table 14 shows 2015 program cost effectiveness.

²³ The Low Income Energy Conservation Education funding of \$25,000 was excluded from the cost effectiveness

²⁴ See footnote 21.

Table 14
Cost Effectiveness for Low Income Weatherization (includes non-energy benefits)

	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent	0.48	(\$132,903)
Total Resource Cost Test	0.44	(\$141,944)
Utility Cost Test	0.35	(\$165,241)
Participant Cost Test	N/A	\$326,131
Ratepayer Impact Cost Test	0.25	(\$276,016)

Program Management

The program manager who is responsible for the *Low Income Weatherization* program in Idaho is also responsible for the program in California, Utah, Washington and Wyoming; energy assistance programs in Idaho, California, Oregon, Utah, Washington and Wyoming; and bill discount programs in California, Utah and Washington. The program manager is responsible for the cost effectiveness of the weatherization program in each state, 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 agency contracts and state specific tariffs.

Program Administration

The Company contracts with Eastern Idaho Community Action Partnership (“EICAP”) and SouthEastern Idaho Community Action Agency (“SEICAA”) to provide services. The two agencies receive federal funds allocated to the Idaho Department of Health and Welfare (“IDHW”) and administered by the Community Action Partnership Association of Idaho (“CAPAI”). Energy efficiency measures are installed in the homes of income eligible households throughout the Company’s service territory by EICAP and SEICAA. The Company funds 85 percent of the cost of approved measures and is further leveraged by the agencies with the funding received by IDHW.

EICAP and SEICAA are responsible for the following:

- Income Verification – Agencies determine participant income eligibility based on CAPAI guidelines. Household’s interested in obtaining weatherization services apply through the agencies. The 2015 income guidelines can be viewed at CAPAI’s website <http://www.idahocommunityaction.org/programs/weatherization-html/weatherization-assistance-program-income-guidelines-html/>
- Energy Audit – Agencies use a United States Department of Energy approved audit tool 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. IDHW and CAPAI also inspect a random sample of homes. See Appendix 3 for verification summary.
- Billing Notification – Agencies are required to submit a billing to Company within 120 days after job completion. The agencies include a form indicating the measures installed and associated cost on each completed home along with their invoice.

Evaluation

The results of an independent third-party process and impact evaluation of the Company’s non-residential programs for program years 2010-2012 can be found on the Company’s website²⁵. Several key findings from this evaluation included:

- The program is operating as planned.
- The program exemplifies a utility best practice in that it is coordinated with United States Department of Energy, United States Department of Health and Human Services and Idaho Department of Health and Welfare. The partnership leverages each utility dollar to serve low income customers.
- The partnership between Low Income Home Energy Assistance (“LIHEAP”) and Weatherization Assistance Program is beneficial to both programs.

Low Income Energy Conservation Education

Commission Order No. 32788 ordered the Company to fund the *Low Income Energy Conservation Education* \$25,000 annually. These education services are provided by EICAP and SEICAA and target participants who receive LIHEAP funds. EICAP, SEICAA and the Company discussed the allocation of the annual funding amount with the agencies determining the efficiency measures to distribute. EICAP received \$13,250 and SEICAA \$11,750 for a total of \$25,000 prior to the beginning of their 2015/2016 LIHEAP program year. While the conservation education activities do result in energy savings, the savings are not considered when calculating the performance results of the Low Income Weatherization program, other energy efficiency programs or portfolios results.²⁶

The agencies provided a conservation education curriculum to households and reported the following activities and program specifics for 2015:

	<u>EICAP</u>	<u>SEICAA</u>
Annual funds:	\$13,250	\$11,750

²⁵ <http://www.pacificorp.com/es/dsm/idaho.html>

²⁶ Order No. 32788

EICAP

Expenditures: 2014 unspent funds = \$3,119
 To be spent in 2016 = \$16,369
 (to purchase programmable
 thermostats, 9 watt LEDs,
 indoor clotheslines)

SEICAA

400 CFLs (13w) = \$552
 400 Window Kits = \$1,300
 400 LED Night Lights = \$500
 400 Weather-stripping = \$800
 350 Conservation Sockets = \$4,375
 Staff Labor = \$2,000
 Remaining Funds = \$2,223

Households served: 296

556

Distribution

EICAP reported that there were major changes made to their process of distributing LIHEAP funds beginning in the fall of 2015, in addition to staffing changes. This resulted in a slow rollout of their conservation education component. To date, EICAP has not spent the \$13,250 from the 2015 payment, or the \$3,119 carryover from 2014. However, EICAP plans to purchase programmable thermostats, LED light bulbs and indoor clotheslines by the end of March 2016. Eligible LIHEAP clients were provided items from previous purchases including 3-pack CFL light bulbs, conservation sockets and smart strips. They provided energy conservation education to 296 households in 2015.

SEICAA distributed the following measures in 2015:

- A total of 226 shower timers and 469 night lights that was purchased in 2013;
- A total of 224 CFLs and 489 power timers that was purchased in 2014;
- A total of 230 window kits, 157 LED night lights, 166 weather-stripping, 206 (13) watt CFLs and 129 conservation sockets purchased in 2015.
- A total of 2,296 measures were distributed to 556 households.

Table 15 provides additional information regarding the education offered by the agencies.

Table 15
Additional Information on Education by Agencies

	EICAP	SEICAA
Program Design	Educate Rocky Mountain Power customers about how to conserve energy and understand their bill.	Reduce electricity usage and monthly bills for participants of the LIHEAP program.
Target Audience	Rocky Mountain Power customers receiving energy assistance.	LIHEAP recipients that have not had weatherization program services are a priority. Households can also be identified through SEICAA's other programs.
Success in Meeting Goals	Acceptance of energy conservation tools after education.	Periodic reporting and participant surveys.
How Company Funds Were Used	Tools that encourage energy conservation.	To purchase energy conservation measures. Funds are also used for educator salaries.
Program Benefits to Participants	Households receive useful tips and tools to help them save energy while applying for LIHEAP.	Households are educated on how they can reduce kWh usage through behavioral changes as well as the installation and benefits of the energy conservation measures they receive during LIHEAP intake. All conservation items are easily installed and instantly create savings for participants upon installation.

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 November 13, 2014. These changes were made in an effort to streamline program administration, as well as provide a single customer facing program brand within the marketplace. The intent of the consolidation was to provide customers with a “one-stop-shop” program, alleviating confusion or perceptions of complexity. The consolidated *Non-Residential Energy Efficiency* program is promoted to the Company’s customers as *wattsmart Business*.

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

Total non-residential program savings increased 29%, from 5,841,257 kWh in 2014 to 7,554,665 kWh in 2015.

Total incentives, savings and completed projects are provided in Table 16 by customer sector.

Table 16
Projects Completed

Sector	Total kWh/Yr Savings @ Site	Total kW Savings @ Site	Total Incentive	Total Projects
Agricultural	1,875,520	324	\$ 239,679	50
Commercial	4,571,390	886	\$ 1,215,625	289
Industrial	1,107,755	226	\$ 151,019	13
Total	7,554,665	1,436	\$ 1,606,322	352

Services offered through the *wattsmart Business* program include:

- **Typical Upgrades:** Provides streamlined incentives for lighting, HVAC, compressed air and other equipment upgrades that increase electrical energy efficiency and exceed code requirements.
- **Small Business Lighting:** Provides enhanced incentives for lighting retrofits installed by approved trade allies at eligible small business customer facilities.
- **Custom Analysis:** Offers investment-grade energy analysis studies and recommendations for more complex projects.
- **Energy Management:** Provides expert facility and process analysis to help lower energy costs by optimizing customer’s energy use.
- **Energy Project Manager Co-funding:** Available to customers who can commit to an annual goal of completing projects resulting in a minimum of 1,000,000 kWh per year in energy savings.

Total incentives and savings by measure group are provided in Table 17.

Table 17
Savings by Measure Category

Measure Category	Total kWh/Yr Savings @ Site	Total kW Savings @ Site	Total Incentive
Building Shell	146,184	77	\$ 58,481
Compressed Air	51,635	1	\$ 7,033
Container	31,915	8	\$ 3,803
Farm & Dairy	46,503	9	\$ 4,590
Food Service Equipment	78,823	13	\$ 8,210
HVAC	717,629	64	\$ 64,834
Irrigation	1,726,674	290	\$ 222,392
Lighting	4,363,774	940	\$ 1,186,407
Motors	391,528	34	\$ 50,572
Total	7,554,665	1,436	\$ 1,606,322

The program was cost effective with a calculated TRC of 1.04 and UCT of 1.60, despite a significant decrease in decrement values. Program performance results for 2015 are provided in Table 18 below.

Table 18
Cost Effectiveness for Non-Residential Energy Efficiency

	Includes Portfolio Costs		Excludes Portfolio Costs	
	Benefit/Cost Ratio	Net Benefits	Benefit/Cost Ratio	Net Benefits
Total Resource Test plus 10 percent	1.15	\$619,706	1.20	\$804,154
Total Resource Cost Test	1.04	\$180,042	1.09	\$364,490
Utility Cost Test	1.60	\$1,646,617	1.71	\$1,831,065
Participant Cost Test	2.05	\$4,142,101	2.05	\$4,142,101
Ratepayer Impact Test	0.56	(\$3,404,187)	0.58	(\$3,219,739)

Program Management

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

Program Administration

The program is primarily administered through two channels that are differentiated based upon customer needs. The first channel generally targets typical opportunities which serve small to medium sized business customers and to lesser extent large business customers. Administration is provided through Company contracts with Nexant, Inc. (“Nexant”) and Cascade Energy (“Cascade”) who manage trade ally coordination, training and application processing services for commercial measures and industrial/agricultural measures respectively. The second channel targets large energy users who generally have multiple opportunities for energy efficiency improvements, such as those that require custom analysis, is administered by internal project managers allowing for a single point of contact to assist customers with their various opportunities.

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, providing program design services, and evaluation and regulatory support upon request.
- Custom analysis and project facilitation for small/medium customer projects.
- Managing savings acquisition to targets within budget.
- Continual improvement of program operations and customer satisfaction.
- Inspections – includes verifying on an on-going basis the installation of measures. Summary of the inspection process is in Appendix 3.

The program is also administered by internal project managers. In this delivery channel, project managers are responsible for the following:

- Single point of contact for large customers to assist with their energy efficiency projects.
- Large customer outreach and education of energy efficiency opportunities.
- Providing custom energy efficiency analysis, quality assurance and verification of savings through a pre-contracted group of engineering firms.
- Managing engineering firms to ensure program compliance, quality of work, and customer satisfaction.
- Managing *wattsmart* Business projects through the whole project lifecycle.

The *wattsmart* Business program administration contracts expire in 2016 for all states. As a result, the Company initiated a request for proposal in 2015 and new contracts will be in place by mid-2016.

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.²⁷

The current count of participating trade allies by technology is in Table 19.

Table 19
Participating Trade Allies²⁸

Lighting trade allies	HVAC trade allies	Motor and VFD trade allies
83	42	46

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 regional business manager located in Idaho. Table 20 lists the engineering firms currently under contract with the Company.

Table 20
Engineering Firms

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

²⁷ Customers receiving Small Business Lighting incentives do need to use an approved contractor selected from a competitive request for bid process.

²⁸ Some trade allies may participate in more than one technology so the count of unique participating firms is less than the total count by technology.

Engineering Firm	Main Office Location
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

Evaluation

The results of an independent third-party process and impact evaluation of the Company's non-residential programs for program years 2012-2013 can be found on the Company's website. Several key findings from this evaluation included:

- Program satisfaction was high for participants.
- The program has very high repeat participation.
- Participants report experiencing non-energy benefits stemming from their projects.
- The program successfully leverages trade allies as a marketing source.
- Financial incentives and economic information were the most influential components of the program.

PEAK REDUCTION PROGRAM

Peak Reduction programs assist the Company in balancing customer energy use during heavy peak summer hours. Further, it assists in deferring the need for higher cost investments in delivery infrastructure and generation resources that would otherwise be needed to serve those loads for a select few hours each year. These programs help the Company maximize the efficiency of the Company's existing electrical system and reduce costs for all customers.

Irrigation Load Control

The *Irrigation Load Control* program is offered to irrigation customers receiving electric service on Schedule 10, Irrigation and Soil Drainage Pumping Power Service. Participants enrolled with a third party administrator to allow the curtailment of their electricity usage in exchange for an incentive. Customer incentives are based on a site's average available load during load control program hours adjusted for the number of opt outs or non-participation. The program hours are 12 to 8pm Mountain Time, Monday through Friday, and do not include holidays. For most participants, their irrigation equipment is set up with a dispatchable two-way control system giving the Company control of the equipment. Under this control option, participants are provided a day-ahead notification of control events and have the choice to opt-out of a limited number of dispatch events per season.

Based on participant feedback and a focus on continual improvement, the program availability expanded from 10 weeks to 12 weeks. Expanding the program by two weeks provides the Company more flexibility to dispatch events and benefits the participants by potentially increasing their availability average which increases their payments.

A summary of the program performance, participation and cost effectiveness results for the program period of June 1, 2015 – August 21, 2015 are provided in Tables 21 and 22.

Table 21
Irrigation Load Control Program Performance

Total Enrolled MW (Gross – at Gen)	278
Average Realized Load MW (at Gen)	155
Maximum Realized Load MW (at Gen)	169
Participation Customers	193
Participation (Sites)	1,122

Table 22
Cost Effectiveness for Irrigation Load Control

	Benefit/Cost Ratio
Total Resource Cost Test plus 10 percent	Pass
Total Resource Cost Test	Pass
Utility Cost Test	Pass
Participant Cost Test	N/A
Ratepayer Impact Test	Pass

Program Management

The program manager who is responsible for the *Irrigation Load Control* program in Idaho is also responsible for the *Irrigation Load Control* and *Cool Keeper* programs in Utah along with *Home Energy Report* in Idaho, Utah and Wyoming. For each state the program manager is responsible for managing the program administrator, the cost effectiveness of the program, contracting with program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes to increase participation.

Program Administration

EnerNoc administers and manages the *Irrigation Load Control* program through a pay-for-performance structure and is responsible for all aspects of the program.

Load Control Events and Performance

There were seven control events initiated in 2015. The date, time and estimated impact for each event is provided in Table 23.

Table 23
Irrigation Load Control Events

Date	Event	Event Times	Estimated Load Reduction - Idaho at Gen (MW)
June 16, 2015	1	4pm-8pm MDT	137
June 18, 2015	2	4pm-8pm MDT	151
June 22, 2015	3	4pm-8pm MDT	160
June 25, 2015	4	4pm-8pm MDT	162
June 26, 2015	5	4pm-8pm MDT	146
June 29, 2015	6	3pm-7pm MDT	169
July 1, 2015	7	4pm-8pm MDT	158

Evaluation

No evaluation activities occurred during 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.

wattsmart is a multi-faceted campaign that shares a common theme: Rocky Mountain Power wants to help you save money and energy.

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 and programs have also been used on a consistent basis. In 2015, the Company issued two newsletters focused entirely on seasonal energy efficiency information targeted in the fall and spring.

Table 24 shows the communication source and the frequency of the message.

Table 24
Communication Source and Frequency

Communication Source	Frequency of Message
Web: rockymountainpower.net/wattsmart and promotional URL wattsmart.com link directly to the energy efficiency landing page. Once there customers can self-select their state for specific programs and incentives.	Messages rotate each month based on the season
Twitter	Tweets posted on a weekly basis
Facebook	Information and tips posted three - five times a week. Promoted posts and mobile ads are also utilized where appropriate.
<i>Voices</i> residential newsletter	Newsletters are sent via bill insert and email six times a year; each issue includes energy efficiency tips and incentive program information
wattsup insert - seasonal change inserts dedicated to energy efficiency	May and October
Home Energy Savings/wattsmart Starter Kit program inserts	2-3 per year
<i>See ya later, refrigerator</i> program inserts	1-3 per year
<i>Energy Connections, Energy Insights</i> -- newsletters to businesses and communities	Articles appear in both monthly and quarterly publications

Paid Media/ wattsmart campaign

In 2015, the Company continued to utilize the *wattsmart* advertising campaign that was originally developed in late 2014. The overall paid media plan objective is to effectively reach our customers through a multi-media mix that extends both reach and frequency. Tapping into all resources with consistent messaging has been the Company's approach and will continue to be refined.

Key strategies include:

- Implementing an advertising campaign featuring *wattsmart* energy efficiency messaging.
- Promoting customer conservation (behavioral changes) and increasing participation and savings through the Company's *wattsmart* DSM programs.
- Motivating customers in Idaho to reduce consumption independently or to do so by participating in the Company's *wattsmart* 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 customers.

The audiences for these messages were prioritized as follows:

- Residential customers
- Low-income customers
- Small/mid-size business customers
- Large commercial/industrial customers
- Retailers, contractors & trade allies

General key messages:

- Using energy wisely at home and in your business saves you money.
- Rocky Mountain Power is your energy partner
 - We want to help you keep your costs down.
 - We offer *wattsmart* programs and cash incentives to help you save money and energy in your home or business.

New creative ways developed in late 2014 which included TV, radio, print and digital. We introduced customers to *Wattsmart*, Idaho – the right place for savings. In *Wattsmart*, folks turn off lights and electronics when not in use. They only use efficient appliances and make sure their homes are well insulated. Kids eat all their veggies and everyone gets along while sharing their chores. The payoff for the campaign is – *You may not live in wattsmart, but you can learn to live wattsmart.*

Each of the ads is focused on a different piece of messaging that we want to deliver to customers.

- Incentives
- Weatherization
- Lighting (LED)
- Turning off the lights and unplugging electronics when not in use
- Keeping the thermostat set to 68 degrees in the winter

Table 25 outlines the value each communication channel provides the overall effort and the impressions achieved in 2015.

Table 25
Communication Channels

Communication Channel	Value to Communication Portfolio	Impressions to date
Television	Television has the broadest reach and works as the most effective media channel.	Idaho Falls: A selection of ads ran at 30 and 15-second spots. <ul style="list-style-type: none"> • 1,058 total spots • 1,710,000 total impressions
Radio	Given the cost relative to television, radio builds on communications delivered via television while providing for increased frequency of messages.	Idaho Falls: <ul style="list-style-type: none"> • 800 spots • 780,000 estimated impressions*
Newspaper	Supports broadcast messages and guarantees coverage in areas harder to reach with broadcast.	A total of 72 insertions were provided to: <ul style="list-style-type: none"> • Jefferson Star/Shelley Pioneer • Idaho State Journal • Idaho Falls Post Register • News-Examiner • Preston Citizen • Rexburg Standard Journal 1,453,838 Total Impressions
Digital Display	Include banner ads on local sites, blogs, behavioral ad targeting, and pay-per-click ad placements.	1,807,953 total impressions
Internet Search (i.e. Google)		23,053 total impressions
Twitter (@RMP_Idaho)	Tweets energy efficiency tips, Tweets posted on a weekly basis	857 Twitter followers
Facebook www.facebook.com/rockymountainpower.wattsmart	Awareness regarding energy efficiency tips and a location to share information.	Facebook advertising – 271,730 total impressions

*Radio impressions are not quantified. Impression is estimated.

The total number impressions for the *wattsmart* campaign were 6,046,574 impressions.

Residential Creative Links

TV

- Wattsmart, Idaho - 68 degrees
- Wattsmart, Idaho - Apple pie
- Wattsmart, Idaho - Caulking gun

Radio

- Wattsmart, Idaho - The Festival
- Wattsmart, Idaho - Good place

Print

- Wattsmart Idaho - 68 degrees
- Wattsmart Idaho - Caulking Capital
- Wattsmart Idaho - well-insulated homes

Online

- Wattsmart, Idaho (68 degrees)
- Wattsmart Idaho - Caulking capital (static)

Program Specific

All energy efficiency program marketing and communications are under the *wattsmart* umbrella to ensure a seamless transition from changing customer behavior to the actions they could take by participating in specific programs. Separate marketing activities administered by and specific to the programs ran in conjunction with the *wattsmart* campaign.

Home Energy Savings

Information on the *Home Energy Savings* program is communicated to customers, retailers and trade allies through a variety of channels. Using a strategic approach, the Company communicates select program measures during key selling seasons and promotes wattsmart Starter Kits to targeted customers throughout the year to achieve savings goals.

Messaging shifted to cooling as summer approached. The Company provided information on shopping for a new room air conditioner and highlighted discounts available at local retailers. In June and July, the Company promoted ductless heat pumps and provided detailed information on the website to educate customers about the benefits of these high-efficiency heating and cooling systems. Customers received information about incentives for ductless heat pumps and insulation through a bill insert, website and social media.



Throughout the year, targeted customer communications were distributed to promote wattsmart Starter kits through direct mail, email and Facebook ads.

During 2015, program communications delivered approximately 152,779 impressions. A breakdown of estimated impressions by channel is shown in Table 26. These estimates do not reflect all of the customer, retailer and trade ally touchpoints.

Table 26
Communication Channels

Communications Channel	2015 Estimated Impressions
Facebook ads	69,779
Bill inserts	76,000
Direct mail	7,000

Home Energy Reports program

In January 2015, the Company introduced Home Energy Reports to Idaho residential customers. The reports provide information about the household's energy use compared to other similar households, and offer personalized energy-saving tips. Customers can also login to the program website to access tools including a progress tracker, bill comparison, home energy assessment and more.

The Company included information in the reports to promote refrigerator recycling in the spring.

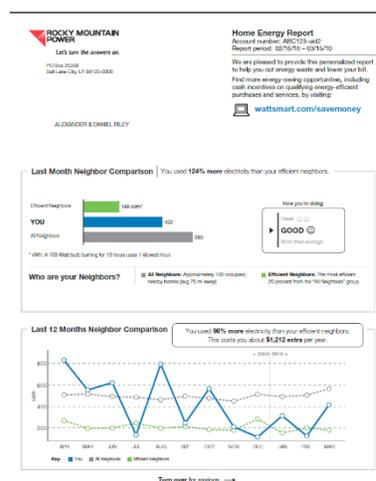
Refrigerator Recycling

In 2015, *See ya later, refrigerator* communications consisted of print and digital advertising, bill inserts and social media.

On November 23, 2015, the Company received notice that the program administrator, JACO, was going out of business. The Company posted a notice on the website to let customers know the program was suspended until further notice. Affected customers also received a direct mail letter and an email to let them know about the situation and that the Company would have replacement incentive checks issued, if necessary.

wattsmart Business

During 2015, communications reminded customers to inquire about incentives for lighting, HVAC, compressed air and other energy efficiency measures. 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 directed viewers to the Company's website.²⁹ This was in addition to customer direct contact by Company project managers and corporate and community managers, trade ally



²⁹ www.wattsmart.com

partners, articles in the Company newsletters, Chamber newsletter outreach and content on the Company website and on Facebook.

Working with the Preston, Idaho Chamber of Commerce, a “lunch and learn” event focused on lighting was held in May to inform small and mid-size business customers about incentives for lighting upgrades.

In June, a bill insert focused on energy savings and incentives for cooling systems was inserted in bills for business customers (excluding irrigation). During the same period, an email on the cooling was sent.

The Company continued to utilize a *wattsmart* “open sign” for businesses and approved vendors to display. Customers were photographed with the “open sign” and the photos were used in the print advertising, case studies, newsletter articles, and on Facebook.

The program’s breakdown of impressions by media type is shown in Table 27.



Table 27
Impressions by Media Type

Communications Channel	2015
Radio	487,500
Print	323,940
Eblasts	4,639
Bill insert	7,028

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 efforts is aimed at the reasonable verification of installations of energy efficient measures 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 organization to ensure they are performed and managed by personnel who are not responsible for program management.

In 2015, the Company awarded a multi-year contract to evaluate the Company's energy efficiency programs for all states for *Home Energy Savings*, *Appliance Recycling* and *wattsmart Business* programs. The contract was awarded through a competitive bid process.

Information on evaluation activities completed or in progress during 2015 is summarized in Table 28 below. Summaries of the recommendations are provided in Appendix 5. The evaluation report is available at www.pacificorp.com/es/dsm/idaho.html

Table 28
Program Evaluations

Program	Years Evaluated	Evaluator	Progress Status
Low Income Weatherization	2010 - 2012	Smith & Lehmann	Completed
Energy FinAnswer	2012 - 2013	Navigant	Completed
FinAnswer Express	2012 - 2013	Navigant	Completed
Home Energy Savings	2013 – 2014	Cadmus	In Progress
See ya, Later Refrigerator	2013 – 2014	Cadmus	In Progress