



Idaho Energy Efficiency and Peak Reduction Annual Report

January 1, 2017 – December 31, 2017

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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	PacifiCorp Total Resource Cost Test with 10 percent adder
RIM	Ratepayer Impact Measure Test
SEICAA	South Eastern 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 76,000 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 status of the demand-side management (“DSM”) Tariff Rider, Customer Efficiency Service Charge - Schedule 191 (“Schedule 191”) as of the reporting period from January 1, 2017 through December 31, 2017. The Company, on behalf of its customers, invested \$4.0 million in energy efficiency resource acquisitions during the reporting period. The investment yielded approximately 17.5 gigawatt-hours (“GWh”) of 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 \$4.8 million.³

Pursuant to Commission Order No. 32196, the Commission ordered that the costs for the Idaho Irrigation Load Control Program should be allocated across PacifiCorp’s six-state system. Therefore, these costs are not recovered through Schedule 191. However, 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 the generator. For line losses, see footnote 19.

² See Energy Efficiency Section for explanation about the calculation of capacity contribution savings.

³ See Table 1 – Utility Cost Test Net Benefits.

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

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Cost Test plus 10 percent ("PTRC") ⁴	1.87	\$4,799,331
Total Resource Cost Test ("TRC") ⁵	1.71	\$3,914,165
Utility Cost Test ("UCT") ⁶	2.19	\$4,812,734
Participant Cost Test ("PCT") ⁷	3.32	\$9,254,483
Ratepayer Impact Test ("RIM") ⁸	0.67	(\$4,455,521)

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 report, includes sector-specific evaluation, measurement and verification ("EM&V") 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 2017 cost-effectiveness performance.

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.

REGULATORY ACTIVITIES

During the 2017 reporting period the Company filed a number of compliance and/or informational reports, updates, notices, and requests with the Commission in support of Company DSM programs. The following is a list of those activities:

- On February 13, 2017, consistent with the flexible tariff process for the Home Energy Savings Schedule 118 and approved in Order No. 29976, a notice of changes to the program was posted on the program website,⁹ 45 days prior to going into effect March 30, 2017. Program changes were designed to add a higher incentive tier for heat pump water heaters, remove CFL offerings, and reinstate energy savings kits that had been previously discontinued.
- On February 17, 2017, the Company circulated the 2014-2015 wattsmart Business Program Evaluation to Commission Staff.
- On April 26, 2017, the Company circulated the DSM balancing account report for the first quarter of 2017.
- On May 1, 2017, pursuant to Order No. 29976, the Company submitted its 2016 Idaho Energy Efficiency and Peak Reduction Annual Report.
- On July 27, 2017, the Company circulated the DSM balancing account report for the second quarter of 2017.
- On August 22, 2017, the Company circulated the 2015-2016 Home Energy Reports Program Evaluation to Commission Staff.
- On September 18, 2017, the Company circulated the 2013-2015 Low Income Weatherization Program Evaluation to Commission Staff.
- On October 24, 2017, the Company circulated the DSM balancing account report for the third quarter of 2017.
- On November 27, 2017, the Company filed Tariff Advice No. 17-01 to modify Schedule 21, Low Income Weatherization Services. Tariff changes were designed to add ductless heat pumps as an eligible measure to the program. Tariff changes went into effect February 1, 2018, pursuant to the consent agenda from the January 22, 2018 Decision Meeting.

⁹ <https://www.rockymountainpower.net/res/sem/idaho.html>

- On December 6, 2017, 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 45 days prior to going into effect January 20, 2018. Key changes included restructuring lighting retrofit incentive offerings, adding prescriptive irrigation incentives, simplification of the HVAC incentive table, adding advanced rooftop control unit measures, adjusting cool roof measures, removing the sunset date for commercial refrigerator and freezer measures, adding new midmarket lighting incentives, and adjusting the small business direct offerings.
- On December 11, 2017, the Company circulated the 2015-2016 Home Energy Savings Program Evaluation to Commission Staff.

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

The Company consulted with Idaho Staff throughout 2017, with formal presentations on the following matters:

October 12, 2017

- Discussed the Company’s 2016 Idaho Energy Efficiency and Peak Reduction Annual Report;
- Reviewed results from evaluations for the 2013-2015 Low Income Weatherization, 2014-2015 wattsmart Business, and 2015-2016 Home Energy Reports programs;
- Discussed Low Income Weatherization cost-effectiveness;
- Discussed the Schedule 191 rate analysis and proposed adjustment recommendation;
- Discussed upcoming changes to the wattsmart Business program to be implemented through the 45-day flexible tariff process; and
- Discussed the 2018 Idaho Strategic Plan including forecast savings and program strategies.

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

¹¹ <https://www.rockymountainpower.net/bus/se/idaho.html>

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.¹² 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 2017 is outlined in Table 2.

Table 2
Schedule 191 Balancing Account Activity

Month	Monthly Program Costs - Fixed Assets	Monthly Net Accrued Costs	Rate Recovery	Carrying Charge	Accrual Basis Accumulated Balance	Cash Basis Accumulated Balance
Dec-16					\$ 194,942	\$ (76,845)
Jan-17	\$ 310,258	\$ (46,481)	\$ (397,238)	\$ (100)	\$ 61,382	\$ (163,925)
Feb-17	\$ 236,383	\$ 14,618	\$ (342,420)	\$ (181)	\$ (30,218)	\$ (270,142)
Mar-17	\$ 268,925	\$ (29,732)	\$ (287,093)	\$ (233)	\$ (78,351)	\$ (288,543)
Apr-17	\$ 182,212	\$ 37,143	\$ (260,750)	\$ (273)	\$ (120,019)	\$ (367,354)
May-17	\$ 235,604	\$ (16,839)	\$ (322,871)	\$ (342)	\$ (224,467)	\$ (454,963)
Jun-17	\$ 245,610	\$ (3,536)	\$ (579,516)	\$ (518)	\$ (562,427)	\$ (789,387)
Jul-17	\$ 426,968	\$ 5,979	\$ (818,042)	\$ (821)	\$ (948,342)	\$ (1,181,281)
Aug-17	\$ 428,030	\$ 50,406	\$ (648,245)	\$ (1,076)	\$ (1,119,227)	\$ (1,402,572)
Sep-17	\$ 393,321	\$ 44,723	\$ (570,823)	\$ (1,243)	\$ (1,253,249)	\$ (1,581,317)
Oct-17	\$ 388,571	\$ 2,932	\$ (329,796)	\$ (1,293)	\$ (1,192,836)	\$ (1,523,835)
Nov-17	\$ 60,683	\$ 129,654	\$ (323,103)	\$ (1,379)	\$ (1,326,981)	\$ (1,787,634)
Dec-17	\$ 792,988	\$ (261,555)	\$ (330,407)	\$ (1,297)	\$ (1,127,251)	\$ (1,326,350)
2017 Totals	\$ 3,969,555	\$ (72,689)	\$ (5,210,303)	\$ (8,756)		

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.

¹² 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.¹³ The plan presents a framework of future actions to ensure the Company continues to provide reliable, reasonably priced service to customers. Energy efficiency and peak management opportunities are incorporated into the IRP based on their availability, characteristics and costs.

PacifiCorp divides energy efficiency and peak management resources into four general classes:

- **Class 1 DSM – Resources from fully dispatchable or scheduled firm capacity product offerings/programs** – After a customer agrees to participate in a Class 1 DSM program, the timing and persistence of the load reduction is involuntary on their part within the agreed upon limits and parameters of the program. Program examples include residential and small commercial central air conditioner load control programs that are dispatchable, and irrigation load management and interruptible or curtailment programs (which may be dispatchable or scheduled firm, depending on the particular program design or event noticing requirements).
- **Class 2 DSM – Resources from non-dispatchable, firm energy and capacity product offerings/programs** – Class 2 DSM programs are those for which 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 on a customer’s part to manage the energy use at their facility or home. Class 2 DSM programs generally provide financial or service incentives to customers to improve the efficiency of existing or new customer-owned facilities through: (1) the installation of more efficient equipment, such as lighting, motors, air conditioners, or appliances; (2) upgrading building efficiency through improved insulation levels, windows, etc.; or (3) behavioral modifications, such as strategic energy management efforts at business facilities and home energy reports for residential customers. The savings endure (are considered firm) over the life of the improvement or customer action. Program examples include comprehensive commercial and industrial new and retrofit energy efficiency programs, comprehensive home improvement retrofit programs, strategic energy management and home energy reports.
- **Class 3 DSM – Resources from price responsive energy and capacity product offerings/programs** – Class 3 DSM programs seeks to achieve short-duration (hour by hour) energy and capacity savings from actions taken by customers voluntarily, based on a financial incentive or signal. As a result of their voluntary nature, participation tends to be low and savings are less predictable, making Class 3 DSM resources less suitable to

¹³ Information on the Company’s integrated resource planning process can be found at the following address: <http://www.pacifiCorp.com/es/irp.html>

incorporate into resource planning, at least until their size and customer behavior profile provide sufficient information for a reliable diversity result (predictable impact) for modeling and planning purposes. Savings typically only endure for the duration of the incentive offering and, in many cases, loads tend to be shifted rather than being avoided. The impacts of Class 3 DSM resources may not be explicitly considered in the resource planning process; however, they are captured naturally in long-term load growth patterns and forecasts. Program examples include time-of-use pricing plans, critical peak pricing plans, and inverted block tariff designs

- **Class 4 DSM—Non-incented behavioral-based savings achieved through broad energy education and communication efforts** – Class 4 DSM programs promote reductions in energy or capacity usage through education. These efforts seek to help customers better understand how to manage their energy usage through no-cost actions such as conservative thermostat settings and turning off appliances, equipment and lights when not in use. The programs are also used to increase customer awareness of additional actions they might take to save energy and the service and financial tools available to assist them. Similar to Class 3 DSM resources, the impacts of Class 4 programs may not be explicitly considered in the resource planning process; however, they are captured naturally in long-term load growth patterns and forecasts. Program examples include Company brochures with energy savings tips, customer newsletters focusing on energy efficiency, case studies of customer energy efficiency projects, and public education campaigns.

Class 1 and 2 DSM resources are included as resource options in the resource planning process. Class 3 and 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, the Company engages a third-party consultant to conduct a DSM Potential Assessment (“Potential Assessment”).¹⁴ The study primarily seeks to develop reliable estimates of the magnitude, timing and cost of DSM resources likely available to PacifiCorp over the 20-year planning horizon of the IRP. The main focus of the Potential Assessment is on resources with sufficient reliability characteristics that are anticipated to be technically feasible and considered achievable during the IRP’s 20-year planning horizon. By definition, the estimated achievable technical potential is the energy efficiency potential that may be achievable to acquire during the 20-year planning horizon prior to cost-effectiveness screening.

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 Potential 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.

¹⁴ PacifiCorp’s Demand-side Resource Potential Assessments can be found at <http://www.pacifiCorp.com/es/dsm.html>.

Cost-effectiveness

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.

Program cost-effectiveness is performed using a Company specific modeling tool, created by a third party consultant. The tool is designed to incorporate PacifiCorp data and values such as avoided costs, and generally follows the methodology specified in California's Standard Practice Manual. The analysis assesses the costs and benefits of DSM resource programs from different stakeholder perspectives, including participants and non-participants, based on four tests described in the Standard Practice Manual (TRC, UCT, PCT and RIM) as well as an additional fifth test, PTRC. The Company has historically emphasized the TRC test in its planning, evaluation and reporting, however, pursuant to Commission Order No. 33766 issued May 18, 2017, the Company was approved to emphasize the UCT over other tests.

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, *Low Income Weatherization* – Schedule 21, *Home Energy Reports*, and *wattsmart Business* – Schedule 140. Program savings and cost results for 2017 are provided in Table 3 below.¹⁵

Table 3
Idaho Program Results for January 1, 2017 – December 31, 2017¹⁶

Program	kWh/Yr Savings (at site)	kWh/Yr Savings (at generator)	Program Expenditures
Low Income Weatherization	131,340	146,399	\$ 248,486
Home Energy Reporting	3,055,279	3,405,597	\$134,821
Home Energy Savings	2,137,201	2,382,253	\$ 477,192
Total Residential	5,323,820	5,934,250	\$ 860,499
wattsmart Business	10,506,687	11,579,948	\$ 2,574,766
Total Energy Efficiency	15,830,507	17,514,197	\$3,435,264
Commercial & Industrial Evaluation Costs			\$ 133,439
Residential Evaluation Costs			\$ 235,892
Low Income Energy Conservation Education			\$ 25,000
Outreach & Communications			\$ 190,748
Potential Study			\$ 7,434
System Support			\$ 11,153
Total System Benefit Expenditures - All Programs			\$ 4,038,931

¹⁵Active Idaho energy efficiency measures are reported in Appendix 6. For a breakdown of program expenditures by category, see Appendix 2.

¹⁶ The values at generation include line losses between the customer site and the generation source. The Company's line losses by sector for 2017 are 11.47 percent for residential, 10.75 percent for commercial, 7.52 percent for industrial and 11.45 percent for irrigation.

Estimated Peak Contributions from Energy Efficiency Programs

The Company estimates its capacity reduction during PacifiCorp's system peak period from the 2017 energy efficiency portfolio. An energy-to-capacity conversion factor, developed from Class 2 DSM selections in the 2015 IRP, is used to translate 2017 energy savings to estimated demand reduction during the system peak. The use 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.

Table 4
Estimated Peak Contribution

Description	Value
First year energy efficiency program MWh savings acquired during 2017	17,514
Conversion factor: Coincident MW/MWh	0.000194
Estimated coincident peak MW contribution of 2017 Idaho energy efficiency acquisitions	3.40

RESIDENTIAL PROGRAMS

The residential energy efficiency portfolio is comprised of three programs: *Home Energy Savings*, *Home Energy Report*, and *Low Income Weatherization*. As shown in Table 5, the residential portfolio was cost effective based on three of the five standard cost-effectiveness tests for the 2017 reporting period. The UCT for the residential portfolio was below 1.0 and was mainly driven by residential sector evaluation costs. In 2017, the Company published evaluations for all three of its residential programs. Table 3 shows the residential evaluation costs for 2017.

Table 5
Cost-effectiveness for Residential Portfolio (includes non-energy benefits)

Benefit/Cost Test	Includes Evaluation Costs		Excludes Evaluation Costs	
	Benefit/Cost Ratio	Net Benefits	Benefit/Cost Ratio	Net Benefits
PTRC	1.16	\$222,037	1.40	\$457,929
TRC	1.09	\$128,700	1.32	\$364,592
UCT	0.83	(\$188,021)	1.05	\$47,871
PCT	3.77	\$2,136,004	3.77	\$2,136,004
RIM	0.33	(\$1,862,911)	0.36	(\$1,627,018)

Total gross residential savings increased slightly when compared to 2016 performance, with the largest savings being derived from the Home Energy Reports program. Information related to 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 6.

Table 6
Eligible Program Measures (Units)

Measure Category	kWh/Yr Savings (@ Site)	Total Incentive	Total Quantity
Appliances	21,005	\$7,300	76
Building Shell	12,475	\$9,655	17,167 (sq. ft)
Energy Kits	341,016	\$10,748	1,071
HVAC	683,139	\$94,840	231
Lighting	1,057,371	\$78,321	61,305
Water Heating	8,379	\$2,750	5
Whole Home	13,816	\$12,000	4
Grand Total	2,137,201	\$215,614	

The program passed all cost effective tests except the RIM as shown in Table 7.

Table 7
Cost-effectiveness for Home Energy Savings Program (includes non-energy benefits)

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.47	\$345,276
TRC	1.38	\$277,904
UCT	1.41	\$196,520
PCT	2.86	\$1,433,906
RIM	0.40	(\$991,256)

Program savings increased in 2017 compared to 2016 and was primarily due to a significant increase in LED lighting participation. In addition, the program replaced CFLs in energy kits to LEDs and offered the kits at no charge to customers.

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. 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 continually improving the program.

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 complete, 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.

Infrastructure

The total number of retailers and trade allies participating in the program is currently 70. Detail of participating retailers by delivery channel and measure type is available in Appendix 4.

Program Changes

The *Home Energy Savings* program made 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 for tier 3 heat pump water heaters, retired CFLs, and began offering energy kits at no cost to customers.

Evaluation

A process and impact evaluation for program years 2015-2016 was completed and published in 2017. Key findings include:

- Gross realization rate of 73 percent;
- Net-to-Gross of 72 percent;
- High program satisfaction with the non-lighting participants at 98 percent;
- Similar to the 2013 – 2014 evaluation, the most commonly cited sources of program awareness for non-lighting participants were retailers at 35 percent; and
- Including non-energy benefits, the program over the two year period was cost effective from the TRC perspective at 1.47 and a UCT of 1.14.

A complete list of program evaluation recommendations and the Company's response is provided in Appendix 8.

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.

The program achieved 3,055,279 kWh of savings at site in 2017. Program cost-effectiveness is provided in Table 8.

Table 8
Cost-effectiveness for Home Energy Reports Program

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.19	\$25,260
TRC	1.08	\$10,707
UCT	1.08	\$10,707
PCT	N/A	N/A
RIM	0.34	(\$282,238)

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 1.39% of customers have requested to be removed from the program. As of December 2017, there were 13,505 customers were active recipients of Home Energy Reports. In 2017, 108 total customers opted out of the program.

All participating customers may request an electronic report delivered via email as well as access to a web portal containing the same information about their usage provided in the report. In addition, all Idaho residential 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. There were 58,488 paper reports and 76,157 email reports delivered to residential customers in Idaho in 2017.

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* program in Idaho and Utah and *Cool Keeper* 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 continually improving the program.

Program Administration

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

Oracle was responsible for the following:

- Selecting Qualifying Customers – Oracle conducted 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 – Oracle performed statistical analysis to perform pattern recognition in order to derive actionable insights to selected customers. Oracle used 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 – Oracle operated and maintained a customer Web portal for participants to visit for additional information about their energy usage and saving opportunities.

The *Home Energy Reports* program administration contract expired on December 31, 2017. As a result, the Company initiated a Request for Proposals on June 19, 2017. Negotiations with a new program administrator were underway during the end of the year, with the contract being fully executed January 2, 2018.

Evaluation

A process and impact evaluation for program years 2015 – 2016 was published in 2017. Key findings include:

- Participants were slightly more likely than control customers to participate in other Rocky Mountain Power energy efficiency programs.
- The program was cost effective from all perspectives except the RIM.
- Overall realization rate was 92%.
- Both the participants and the control group reported high satisfaction with Rocky Mountain Power (87%). Sixty-two percent of participants reported satisfaction with the program.

A complete list of program evaluation recommendations and the Company's response is provided in Appendix 8.

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.

In 2017, the program achieved 131,340 kWh of savings at site and treated 60 homes. Total homes treated as well as the type and frequency of specific energy efficiency measures installed in each home is provided in Table 9. Rocky Mountain Power did not provide funding on all measures listed as some were installed to reduce natural gas usage.

Table 9
Homes Receiving Specific Measures

Participation – Total # of Completed/Treated Homes	60
Number of Homes Receiving Specific Measures	
Attic Ventilation	19
Ceiling Insulation	26
CFL Bulbs	8
LED Light Bulbs	51
Duct Insulation	19
Floor Insulation	19
Furnace Repair	35
Furnace Replacements	22
Health & Safety Measures	60
Infiltration	60
Refrigerators	29
Replacement Windows	48
Thermal Doors	45
Wall Insulation	9
Water Heater Repair	39
Water Heater Replacement	2
Water Pipe Insulation	58

The *Low Income Weatherization* program was cost effective from the PTRC and TRC, but failed the UCT and RIM.¹⁷ Table 10 shows 2017 program cost-effectiveness.

¹⁷ The Low Income Energy Conservation Education funding of \$25,000 was excluded from the program cost effectiveness, but is included in the residential sector and portfolio cost-effectiveness.

Table 10
Cost-effectiveness for Low Income Weatherization (includes non-energy benefits)

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.45	\$112,394
TRC	1.41	\$100,981
UCT	0.46	(\$134,357)
PCT	N/A	N/A
RIM	0.26	(\$328,524)

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 South Eastern 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 is required to fund 85 percent of the cost of approved measures, pursuant to Commission Order No. 32151. Agencies cover remaining costs 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 current income guidelines can be viewed at CAPAI’s website <http://www.capai.org/wx>
- 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. CAPAI also inspects a random sample of homes. See Appendix 3 for the 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.

Low Income Energy Conservation Education

Commission Order No. 32788 authorized the Company to fund the *Low Income Energy Conservation Education* with \$25,000 annually. These education services are provided by EICAP and SEICAA and target participants who receive Low Income Home Energy Assistance Program (“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 \$16,000 and SEICAA \$9,000 for a total of \$25,000 prior to the beginning of their 2017/2018 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.¹⁸

The agencies provided a conservation education curriculum to households and reported the following activities and program specifics for 2017 in Table 11.

Table 11
2017 Conservation Education Activities

	EICAP	SEICCA
Annual Funds	\$16,000	\$9,000
Expenditures	\$12,996	\$16,178
Balance as of 12/31/17	\$23,353	\$51,822
Households served	225	493

Distribution

EICAP purchased 450 kits in 2017 totaling \$12,996, and reported on the distribution of 75 of these kits. The new kits include 2 LED bulbs, weather-stripping, a window insulation kit, a refrigerator/freezer thermometer, 10 foam outlet gaskets, rope caulk, a surge protector/smart power strip and a kitchen aerator. 2017 is the first year EICAP tracked kit distribution in their database.

In 2017, EICAP conducted community education courses and taught classes about conserving energy and how to read and understand utility bills. Participants who were Rocky Mountain Power customers received a kit.

¹⁸ Order No. 32788

EICAP also distributed kits to Rocky Mountain Power clients who applied for LIHEAP. These kits are not reflected in this report since they have not yet been entered in their database but will be once the LIHEAP season ends and all applications are scanned.

Remaining kits inventory will be mailed out to Rocky Mountain Power customers in May 2018 along with tips and an invitation to apply for LIHEAP in November 2018. A portion of the remaining funds will cover mailing costs and EICAP will continue to provide energy conservation education. They currently have 190 kits purchased in 2016 and 375 kits purchased in 2017 in their inventory.

SEICAA purchased 457 kits in 2017 for \$16,178 and 257 households received one of these kits. The kit included a smart power strip, 2 LED bulbs, rope caulk, 10 outlet gaskets, a window insulation kit, weather-stripping and a thermometer. SEICAA staff also distributed measures purchased prior to 2017 including shower timers, window kits, CFL bulbs, night lights, weather-stripping tape, and conservation sockets.

SEICAA distributed the majority of their kit inventory purchased in 2015, with 154 measures (84 CFLs, 50 night lights and 20 conservation sockets) remaining in stock. A total of 327 of these items were distributed to 216 households. They used 2016 and 2017 funding to purchase new kits that they began distributing in November 2017. After distributing 257 kits, 180 remain in their inventory as of December 31, 2017.

Table 12 provides information regarding the education offered by the agencies.

Table 12
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 who receive energy assistance and request energy conservation education.	LIHEAP recipients who have not received weatherization program services are a priority. Households can also be identified through SEICAA's other programs.
How Company Funds Were Used	Energy efficiency kits purchased.	Purchased and distributed energy conservation kits with funding received in 2016 and 2017.
Program Benefits to Participants	Households receive useful tips and tools to help them save energy year around but especially during the winter months.	Households are educated on how they can reduce kWh usage through behavioral changes in addition to the energy savings benefits of installing energy conservation measures they receive during LIHEAP intake. All conservation items are easy-to-install measures.

Evaluation

A process and impact evaluation for program years 2013-2015 was completed and published in 2017. Key findings include:

- Overall program realization rate of 90 percent;
- Estimated savings is lower than the previous evaluation; and
- The program was cost effective from the PTRC and TRC, but not the UCT and RIM.

A complete list of program evaluation recommendations and the Company's response is provided in Appendix 8.

NON-RESIDENTIAL ENERGY EFFICIENCY

The commercial, industrial and agricultural energy efficiency program portfolio is offered through a single Non-Residential Energy Efficiency program called *wattsmart* Business.

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

Total non-residential program gross savings decreased from 2016 program performance and was driven by decreases in the commercial sector, particularly lighting.

Total incentives, savings and completed projects are provided in Table 13 by customer sector.

Table 13
Savings by Sector

Sector	Total kWh/Yr Savings	Total Incentive	Total Projects
Commercial	7,082,989	\$1,055,169	282
Industrial	2,038,579	\$285,142	22
Irrigation	1,385,119	\$199,637	39
Grand Total	10,506,687	\$1,539,948	343

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 Direct Install: provides enhanced incentives for lighting retrofits installed by a Rocky Mountain Power contractor 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 category is provided in Table 14.

Table 14
Savings by Measure Category

Measure Category	kWh/Yr Savings (@ Site)	Total Incentive	Total Projects
Additional Measures	48,921	\$7,338	1
Building Shell	27,816	\$15,067	3
Compressed Air	329,195	\$49,379	3
Direct Install	1,485,445	\$429,523	157
Energy Management	342,880	\$6,858	1
Energy Project Mgr Co-Funding	-	\$67,772	2
Farm & Dairy	382,158	\$54,315	6
Food Service Equipment	13,218	\$650	1
HVAC	910,211	\$77,233	16
Irrigation	1,106,213	\$157,774	29
Lighting	5,034,297	\$552,486	110
Motors	254,351	\$36,457	12
Refrigeration	571,982	\$85,094	2
Grand Total	10,506,687	\$1,539,948	343

The Non-Residential Portfolio was cost effective from all perspectives except the RIM. Program performance results for 2017 are provided in Table 15 below.

Table 15
Cost-effectiveness for Non-Residential Portfolio

Benefit/Cost Test	Includes Portfolio Costs		Excludes Portfolio Costs	
	Benefit/Cost Ratio	Net Benefits	Benefit/Cost Ratio	Net Benefits
PTRC	2.22	\$4,786,629	2.30	\$4,920,069
TRC	2.02	\$3,994,800	2.09	\$4,128,239
UCT	2.92	\$5,210,091	3.08	\$5,343,530
PCT	3.21	\$7,118,479	3.21	\$7,118,479
RIM	0.77	(\$2,383,275)	0.78	(\$2,249,836)

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 delivery channels that are differentiated based upon customer needs: contracted DSM delivery and internal DSM delivery. For customers with high energy savings potential, the program offers Energy Project Manager Co-funding administered through its internal DSM delivery.

Contracted DSM Delivery

The Contracted DSM Delivery channel generally targets typical opportunities that serve small to medium sized business customers and, to a lesser extent, large business customers. Administration is provided through Company contracts with Nexant, Inc. (“Nexant”), Cascade Energy (“Cascade”) and Willdan Energy Solutions (“Willdan”). Nexant and Cascade manage trade ally coordination, training and application processing services for commercial measures and industrial/agricultural measures respectively. Willdan manages the small business direct installation offer.

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

Willdan is responsible for:

- Direct customer outreach, energy assessment, product supply, installation and inspection.
- 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.
- Managing savings acquisition to targets within budget.
- Continual improvement of program operations and customer satisfaction.

Internal DSM Delivery

The Internal DSM Delivery channel targets large energy users who generally have multiple opportunities for energy efficiency improvements, such as those that require complex custom analysis. These large projects are administered by internal Company project managers and allows for a single point of contact to assist customers with their various opportunities. 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.
- Provide customer outreach and education of energy efficiency opportunities.
- Facilitate custom energy efficiency analysis, quality assurance and verification of savings through a pre-contracted group of engineering firms. (See Table 20 below.)
- Manage engineering firms to ensure program compliance, quality of work and customer satisfaction.
- Manage wattsmart Business projects through the whole project lifecycle.

Infrastructure

Contracted DSM Delivery – Trade Ally Networks

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 trade allies who have applied and been approved as participating vendors are posted on the Company website and is included as Appendix 5 to this report. In most cases, customers are not required to select a vendor from these lists to receive an incentive.¹⁹

Since 2002, the Company's trade ally network grew into a large, mature network of trade allies. However, the performance of trade allies varied with regard to industry experience, quality of workmanship, program knowledge and willingness to be a utility partner.

In 2017 all trade allies were asked to re-apply under new program guidelines put in place to encourage good market behavior. To improve trade ally network performance, a variety of actions were taken. Minimum participation requirements were raised, including mandatory industry trainings, proof of insurance, and proof of applicable licenses. Quarterly trade ally performance scorecards were introduced to provide timely feedback and encourage trade allies to reach "Premium" status. The following trade ally performance categories were established to align with program objectives:

- Level of participation (project count and savings)
- Customer satisfaction
- Program satisfaction
- Project submission quality

¹⁹ Customers receiving Small Business Lighting incentives do need to use an approved contractor that has been selected from a competitive request for bid process.

- Experience/training

The Company also created a tiered network with associated incentives for top performing trade allies to be designated as “premium”, thus differentiating them from their peers. This offer was launched in late 2017 and, being in its infancy, has yet to produce reportable data.

Contracted DSM Delivery – Small Business Direct Installation Offer

Program year 2017 was the first full operational year of the small business direct installation offer, branded as “*wattsmart* Small Business Direct”. The offering targets the small business customers with an expedited lighting incentive and targets specific geographical locations with marketing and outreach. In 2017, the offer resulted in:

- 1,485,445 kWh installed directly at customer sites;
- 6 cities served: Ammon, Idaho Falls, Iona, Montpelier, Preston, Rexburg;
- 158 installed customer projects;
- Average kWh per installed project: 9,461;
- Average customer copay: \$911;
- Average customer incentive: \$2,735.

In the first year of operating this program, it was discovered that there is a greater demand in rural markets than originally expected, presenting an opportunity to extend the amount of time spent in each location and limit the number of locations. Rural communities also produced higher eligible customer participation rates (16%) than urban communities (7%).

Internal DSM Delivery

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. Larger customers are managed by internal project managers, while small/medium customers are outsourced directly to a qualified program administration firm for custom analysis. Each customer’s project is directly managed by one of the Company’s in-house project managers. The in-house team works directly with the customer or through the appropriate Company regional business manager located in Idaho.

Table 16 lists the engineering firms under contract with the Company to provide energy efficiency analysis for internal project managers.

Table 16
Engineering Firms

Engineering Firm	Main Office Location
Brendle Group	Fort Collins, CO
Cascade Energy Engineering	Cedar Hills, UT
EMP2, Inc	Richland, VA
Energy Resource Integration, LLC	Sausalito, CA
4Sight Energy	Boise, ID
ETC Group, Incorporated	Salt Lake City, UT
Evergreen Consulting Group	Beaverton, OR
kW Engineering, Inc.	Salt Lake City, UT
Nexant, Incorporated	Salt Lake City, UT
RM Energy Consulting	Pleasant Grove, UT
Rick Rumsey, LLC	Ammon, ID
Solarc Architecture & Engineering, Inc.	Eugene, OR

Energy Management

Energy Management is a system of practices that creates reliable and persistent electric energy savings through improved operations, maintenance and management practices in customer facilities. Energy management can result in improved system operation, lower energy costs, reduced maintenance and repair costs and extended equipment life, and improved occupant comfort and productivity for tenants and employees. This program offering is being emphasized by the utility and pushed out into the market in the coming year.

Energy Project Manager Co-Funding

The Energy Project Manager offering is a co-funded staff resource at a customer facility to develop and manage energy projects. Customers can establish an annual energy savings goal and receive Energy Project Manager Co-funding proportionate to that goal (subject to caps). To date, there is one customer in Idaho who consistently participates in this offer due to their large size. Table 17 illustrates how Energy Project Manager's may be incented.

Table 17
Energy Project Manager Incentive Structure

Payment Structure	Payment Amount	Milestone
1 - Initial payment (optional)	1/3 of funding amount* (not to exceed \$25,000)	<ol style="list-style-type: none"> 1. Customer selects an Energy Project Manager. 2. Company & Customer work together on Comprehensive Plan for electric energy savings. 3. Customer signs the Energy Project Manager Offer.
2 - Final payment	\$0.025 per kWh of energy savings achieved, to a maximum 100 percent of approved Energy Project Manager Salary and less the initial payment	<ol style="list-style-type: none"> 1. At the end of performance period as defined in the Energy Project Manager Offer.

To summarize the *wattsmart* Business internal structure, Table 18 shows the delivery channel, its targeted customer segment, provider(s), and the type of services.

Table 18
wattsmart Business Structure

Delivery Channel	Targeted Customer Segment	Providers	Services
Internal Delivery	Commercial & Industrial	Outsourced Engineers	Custom, typical, energy management, energy project manager co-funding
Contracted Delivery (Small Business Direct Install, Trade Ally)	Small Businesses	Willdan	Typical
	Commercial & Industrial	Nexant/Trade Allies	Typical

Program Changes

In late 2017, the Company filed its 45-day notice for several program changes to commercial HVAC and lighting and applications. Federal HVAC standards have experienced changes and been redefined and thus the Consortium of Energy Efficiency updated their efficacy standard matrix. The Company has also adopted these increased HVAC standards into our incentive structure. Program changes were effective January 2018.

The Company also restructured its LED lighting offering. LED technology has become the predominant lighting technology in energy efficiency projects, and that trend is anticipated to

continue. Long lamp life (30,000 hours+), reduced lifetime maintenance costs, absence of hazardous materials (i.e. mercury), controllability, higher efficacy (lumens/watt) and decreasing costs relative to traditional technologies have contributed to a shift toward using LED products on most energy efficiency projects.

To address the continuing and rapid shift to more efficient LED technologies, the Company revamped the form and value of lighting incentives listed in the lighting retrofits table on the website²⁰. The Company moved away from incenting lighting retrofits by fixture or bulb, and lowered the incentive per kWh. In lieu of fixture based incentives or high \$-per-kWh incentives the Company has shifted the incentive structure to incent the installation of basic and advanced controls in lighting retrofits. Incentives are still available for simple lighting retrofits, but have been decreased unless customers install controls methodologies with their LEDs.

The Company also introduced prescriptive irrigation measures as well as a midstream lighting program that will incent numerous lighting technologies at commercial lighting distributors to be bought down at the point-of-purchase. As these new program offerings were announced in late 2017 there is not yet reportable data.

Evaluation

The *wattsmart* Business program evaluation for program years 2014-2015 was performed in 2016 and published in early 2017. Key findings include:

- Overall realization rate of 103.5 percent and an overall net-to-gross of 82 percent.
- The program was cost effective from all perspectives except the RIM.
- Participants in the small business lighting and typical upgrades reported higher satisfaction levels than participants in the custom analysis.
- High levels of participant satisfaction with small business lighting and typical upgrades with work provided by their contractor or vendor. There was less satisfaction with the custom participants.

A complete list of program evaluation recommendations and the Company's response is provided in Appendix 8.

²⁰ <https://www.rockymountainpower.net/bus/se/idaho/il/lighting/lighting-retrofits.html>

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 12pm to 8pm Mountain Time, Monday through Friday, and exclude 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.

A summary of the program performance, participation and cost-effectiveness results for the program period of May 29, 2017 – August 18, 2017 are provided in Tables 19 and 20.

Table 19
Irrigation Load Control Program Performance

Total Enrolled MW (Gross – at Gen)	247
Average Realized Load MW (at Gen)	118
Maximum Realized Load MW (at Gen)	168
Participation Customers	196
Participation (Sites)	1,337

Table 20
Cost-effectiveness for Irrigation Load Control

Benefit/Cost Test	Benefit/Cost Ratio
PTRC	Pass
TRC	Pass
UCT	Pass
PCT	N/A
RIM	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 five control events initiated in 2017. The date, time and estimated impact for each event is provided in Table 21.

Table 21
Irrigation Load Control Events

Date	Event	Event Times	Estimated Load Reduction - Idaho at Gen (MW)
June 20, 2017	1	4pm-8pm MDT	162
June 22, 2017	2	4pm-8pm MDT	168
July 7, 2017	3	3pm-7pm MDT	164
August 2, 2017	4	4pm-8pm MDT	56
August 28, 2017	5	3pm-7pm MDT	42

Evaluation

No evaluation activities occurred during 2017.

COMMUNICATIONS, OUTREACH AND EDUCATION

The Company uses earned media, customer communications, paid media, and program-specific media 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 to reduce their energy usage through behavioral changes as well as changes in equipment, appliances, and structures. The Company calls this multi-faceted campaign “wattsmart” and 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 are delivered to all customer classes that promote energy efficiency tips, programs and incentives. Bill inserts and outer envelopes that feature energy efficiency messages are consistently used. The Company also uses its website and social media, such as Twitter and Facebook, to communicate and engage customers on DSM offers and incentives. Table 22 shows the communication source and the frequency of the message.

Table 22
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	Weekly tweets
Facebook	Information and tips posted 2-3 times per week. Promoted posts and mobile ads are also used where appropriate.
<i>Voices</i> residential newsletter	Newsletters are sent via bill insert and email 5-6 times per year with energy efficiency information
Home Energy Savings/wattsmart Starter Kit program inserts	2-3 per year
<i>Energy Insights</i> newsletter to businesses and communities	1-2 per year

Paid Media/ wattsmart Campaign

In 2017, the Company developed a new wattsmart advertising campaign to inform and educate residential customers about the benefits energy efficiency contributes to the greater good in addition to saving money. 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:

- Implement an advertising campaign that features wattsmart energy efficiency messaging and connect it to benefits for Idaho.
- Promote customer conservation (behavioral changes) and increase participation and savings through the Company's wattsmart DSM programs.
- Motivate customers in Idaho to reduce consumption independently or to do so by participating in the Company's wattsmart DSM programs.
- Educate customers on how these programs can help them save money on their utility bills, reduce energy consumption and to help Idaho thrive.
- Demonstrate by example how business customers are saving energy and enjoying the benefits of being wattsmart.

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 and trade allies

General Key Messages:

- Using energy wisely at home and in your business saves you money, and it's good for Idaho.
- 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.
 - Being wattsmart is good for your wallet, and for Idaho, now and into the future.

To reach residential customers, the Company used TV, radio, social, and digital. Large-scale typography along with beautiful scenic images of Idaho was combined with footage of people taking small steps (changing lighting to LED lamps, adjusting smart thermostat setting) to save energy and money and to make a big difference for Idaho and the environment, now and into the future.

New creative was developed to target business customers and included TV, radio, print, social media, and digital. An overlay of typography to punctuate key points was included in TV created

ads so messages resonate better when played on hand-held devices when the sound is muted. Ads focused on case studies and highlighted business customers that saved energy and money by being wattsmart. Ads geo-targeted by zip code were used on Facebook to reach small business customers with time-sensitive messages to encourage lighting upgrades.

Table 23 outlines each communication channel and the overall impressions achieved in 2017.

Table 23
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: <ul style="list-style-type: none"> • 585,504residential impressions • 731,880business 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"> • 305,280 residential impressions381,600 business impressions
Newspaper	Supports broadcast messages and guarantees coverage in areas harder to reach with broadcast.	A total of 12 insertions targeting business customers 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 • 133,632total impressions
Digital Display	Include banner ads on local sites, blogs, behavioral ad targeting, and pay-per-click ad placements.	3,780,369total impressions
Internet Search (i.e. Google)	20,622 total impressions	16,417 total impressions
Twitter (@RMP_Idaho)	Tweets energy efficiency tips, Tweets posted on a weekly basis	1,041 Twitter followers
Facebook www.facebook.com/rockymountainpower.wattsmart	Awareness regarding energy efficiency tips and a location to share information.	23,124 Facebook followers Facebook advertising –884,338 total impressions

The total number impressions for the wattsmart campaign were 6,819,020 impressions.

Residential Creative Links

TV

- [Being wattsmart is good, Idaho - 78 degrees](#) (summer)
- [Being wattsmart is good, Idaho – 68 degrees](#) (autumn)

Radio

- [Being wattsmart is good, Idaho](#)

Social

- [Being wattsmart is good, Idaho](#)

Online

- [Being wattsmart is Good, Helps, Better, Idaho](#)
- [Being wattsmart is Good \(digital storyboard\)](#)

Business Creative Links

TV

- [Maverik case study TV](#)
- The Smith [Group](#) case study TV

Radio

- [Maverik case study](#) radio
- The [Smith](#) Group case study radio

Print

- [Maverik case study](#) print [The Smith Group case study print](#)

Social Media

- [Wattsmart Small Business Direct for Rexburg](#)
- [wattsmart Small Business Direct video](#) and [Facebook ads to promote video](#)
- [Maverik case study Facebook](#)

Online

- [Maverik case study digital/mobile](#)
- Maverik case [study](#) YouTube
- [The Smith Group case study digital](#)

Program Specific Communications

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 including bill inserts, newsletters, emails, website and social media.

In September and October, the Company promoted free wattsmart Starter Kits through a flyer to schools, a direct mail piece and an email to targeted Idaho residents.

To help customers prepare for winter, the Company also distributed an email in November that provided tips and links to smart thermostat and insulation incentives.

A summary of outreach is displayed in Table 24:

Table 24
Home Energy Savings Communications

Communications Channel	Number of Customers
Kit flyer distributed through school program	1,250
Direct mail	500
Email – kits	5,699
Email – winter savings	24,525
Total	31,974

Any home can be a
wattsmart home.



All you have to do is order a free **wattsmart** Starter Kit.

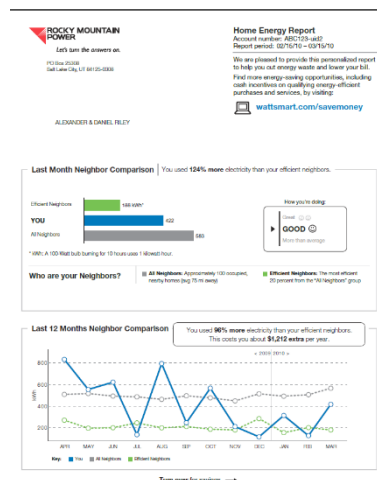
Home Energy Reports program

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.

In 2017, the Company included information in the reports to promote energy efficiency and renewable energy choices.

wattsmart Business program

During 2017, communications reminded customers to inquire about incentives for lighting, HVAC, compressed air, and other energy efficiency measures. Radio and print ads featured case study examples from program participants. Eblasts and digital search directed viewers to the Company's website.²¹



²¹ www.wattsmart.com

This was in addition to customer direct contact by Company project managers and regional business managers, trade ally partners, articles in the Company newsletters, and content on the Company website and on Facebook.

Emails informed customers about available incentives, including one targeted to reach grocery/convenience stores. Customers were invited via email to a free webinar regarding a new optional finance tool available for energy efficiency projects. One Idaho customer was recognized as wattsmart Business Partner of the year, presented with a trophy and announced in a press release.²²

Promoted posts and a video focused on wattsmart Small Business Direct, a program specifically designed to help small businesses upgrade to energy-efficient lighting, was created and promoted in geo-targeted zip codes on Facebook.

The program's breakdown of impressions by media type is shown in Table 25.

Table 25
Impressions by Media Type

Communications Channel	2017
Radio	445,200
Print	138,657
Display	734,127
Social	528,114
Eblasts	1,866
Search	4,297

Energy Education in Schools

The Company offers a wattsmart 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 hands-on, large group activities for 4th 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 2017, NEF conducted presentations in Idaho schools in the fall. Between October 18 and November 8, 2017, the program met its outreach goals by completing 20 presentations to reach 1,420 students and 61 teachers with 90 percent of "Household Report Cards", which are used as part of a home energy audit activity, completed and returned.

The Idaho NEF report is available as Appendix 7.

²² <https://www.rockymountainpower.net/about/nr/nr2017/BYU-Idaho-wattsmart-business-partner-award.html>

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.

Information on evaluation activities completed or in progress during 2017 is summarized in Table 26 below. Summaries of the recommendations are provided in Appendix 8. The evaluation report is available at www.pacificorp.com/es/dsm/idaho.html.

Table 26
Program Evaluations

Program	Years Evaluated	Evaluator	Progress Status
Low Income Weatherization	2013 - 2015	Opinion Dynamics	Completed
Home Energy Reports	2015 - 2016	Navigant	Completed
Home Energy Savings	2015 – 2016	Cadmus	Completed
wattsmart Business	2014 - 2015	Cadmus	Completed
wattsmart Business	2016 - 2017	Cadmus	In Progress
Irrigation Load Control	2016 - 2017	AEG	In Progress



Appendix 1

Idaho Cost Effectiveness



Memorandum

Energy Efficiency Portfolio and Component Sector Cost Effectiveness

Navigant estimated the cost-effectiveness for the overall energy efficiency portfolio and component sectors, based on 2017 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall energy efficiency portfolio and the two sector components.

The portfolio passes the cost-effectiveness for all the tests except the RIM test. The memo consists of the following tables.

Table 1 - Utility Inputs

Table 2 – Portfolio Level Costs 2017

Table 3 – Benefit/Cost Ratios by Portfolio Type

Table 4 – 2017 Total Portfolio (Including NEBs) Cost-Effectiveness Results

Table 5 - 2017 Total Portfolio Cost-Effectiveness Results

Table 6 – 2017 C&I Energy Efficiency Portfolio Cost-Effectiveness Results

Table 7 – 2017 Residential Energy Efficiency Portfolio (Including NEBs) Cost-Effectiveness Results

Table 8 – 2017 Residential Energy Efficiency Portfolio Cost-Effectiveness Results

Table 9 – Low Income Non-Energy Benefits (2017)

Table 10 - Home Energy Savings Non-Energy Benefits by Measure

Table 1 - Utility Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	11.47%
Commercial Line Loss	10.75%
Industrial Line Loss	7.52%
Irrigation Line Loss	11.45%
Residential Energy Rate (\$/kWh) ¹	\$0.1034
Commercial Energy Rate (\$/kWh) ¹	\$0.0879
Industrial Energy Rate (\$/kWh) ¹	\$0.0644
Irrigation Energy Rate (\$/kWh) ¹	\$0.0917
Inflation Rate	1.9%

¹ Future rates determined using a 1.9% annual escalator.

Table 2 – Portfolio Level Costs 2017

Expense	Cost
Commercial & Industrial Evaluation Costs	\$133,439
Residential Evaluation Costs	\$235,892
Low Income Energy Conservation Education	\$25,000
Outreach & Communications	\$190,748
Potential Study	\$7,434
System Support	\$11,153
Total Costs	\$603,667

Table 3 – Benefit/Cost Ratios by Portfolio Type

Measure Group	PTRC	TRC	UCT	RIM	PCT
Total Portfolio (Including NEBs)	1.87	1.71	2.19	0.67	3.32
Total Portfolio	1.77	1.61	2.19	0.67	3.23
C&I Programs	2.22	2.02	2.92	0.77	3.21
Residential Programs (Including NEBs)	1.16	1.09	0.83	0.33	3.77
Residential Programs	0.75	0.68	0.83	0.33	3.33

Table 4 – 2017 Total Portfolio (Including NEBs) Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0551	\$5,505,557	\$10,304,888	\$4,799,331	1.87
Total Resource Cost Test (TRC) No Adder	\$0.0551	\$5,505,557	\$9,419,721	\$3,914,165	1.71
Utility Cost Test (UCT)	\$0.0404	\$4,038,931	\$8,851,665	\$4,812,734	2.19
Rate Impact Test (RIM)		\$13,307,186	\$8,851,665	-\$4,455,521	0.67
Participant Cost Test (PCT)		\$3,994,113	\$13,248,595	\$9,254,483	3.32
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000036028
Discounted Participant Payback (years)					1.77

Table 5 - 2017 Total Portfolio Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0551	\$5,505,557	\$9,736,831	\$4,231,275	1.77
Total Resource Cost Test (TRC) No Adder	\$0.0551	\$5,505,557	\$8,851,665	\$3,346,108	1.61
Utility Cost Test (UCT)	\$0.0404	\$4,038,931	\$8,851,665	\$4,812,734	2.19
Rate Impact Test (RIM)		\$13,307,186	\$8,851,665	-\$4,455,521	0.67
Participant Cost Test (PCT)		\$3,994,113	\$12,915,876	\$8,921,764	3.23
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000036028
Discounted Participant Payback (years)					1.77

Table 6 – 2017 C&I Energy Efficiency Portfolio Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0463	\$3,923,495	\$8,710,125	\$4,786,629	2.22
Total Resource Cost Test (TRC) No Adder	\$0.0463	\$3,923,495	\$7,918,295	\$3,994,800	2.02
Utility Cost Test (UCT)	\$0.0319	\$2,708,205	\$7,918,295	\$5,210,091	2.92
Rate Impact Test (RIM)		\$10,301,570	\$7,918,295	-\$2,383,275	0.77
Participant Cost Test (PCT)		\$3,221,711	\$10,340,189	\$7,118,479	3.21
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000043176
Discounted Participant Payback (years)					2.34

Table 7 – 2017 Residential Energy Efficiency Portfolio (Including NEBs) Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0909	\$1,372,726	\$1,594,763	\$222,037	1.16
Total Resource Cost Test (TRC) No Adder	\$0.0909	\$1,372,726	\$1,501,426	\$128,700	1.09
Utility Cost Test (UCT)	\$0.0742	\$1,121,391	\$933,370	-\$188,021	0.83
Rate Impact Test (RIM)		\$2,796,280	\$933,370	-\$1,862,911	0.33
Participant Cost Test (PCT)		\$772,402	\$2,908,406	\$2,136,004	3.77
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000027208
Discounted Participant Payback (years)					0.81

Table 8 – 2017 Residential Energy Efficiency Portfolio Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0909	\$1,372,726	\$1,026,706	-\$346,020	0.75
Total Resource Cost Test (TRC) No Adder	\$0.0909	\$1,372,726	\$933,370	-\$439,357	0.68
Utility Cost Test (UCT)	\$0.0742	\$1,121,391	\$933,370	-\$188,021	0.83
Rate Impact Test (RIM)		\$2,796,280	\$933,370	-\$1,862,911	0.33
Participant Cost Test (PCT)		\$772,402	\$2,575,687	\$1,803,285	3.33
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000027208
Discounted Participant Payback (years)					0.81

The tables below summarize the non-energy benefits for the Low Income and Home Energy Savings programs.

Table 9 – Low Income Non-Energy Benefits (2017)

Non-Energy Benefit	Program Impact	Perspective Adjusted
Health & Safety Benefit	\$143,417.40	PTRC, TRC
Payment Assistance	\$79,680.00	PTRC, TRC
Arrearage	\$12,240.00	PTRC, TRC
Total	\$235,337.40	

Table 10 - Home Energy Savings Non-Energy Benefits by Measure

Measure Name	Non-Energy Benefits Water (\$/yr)	Non-Energy Benefits Other (\$/yr)	Quantity	Measure Life	Total NEBs (\$/yr)	Discount Rate	Total Net Present Value Benefits
Appliances	\$1,530	\$0	76	13.0	\$1,530	6.66%	\$13,901.51
Energy Kits - DHW	\$16,011	\$0	605	11.0	\$16,011	6.66%	\$130,251.11
Energy Kits - Lighting	\$0	\$648	466	13.0	\$648	6.66%	\$5,887.07
Lighting	\$0	\$46,731	61,305	12.0	\$46,731	6.66%	\$403,162.36
Total NEBs	\$17,540	\$47,379	62,452	-	\$64,919	-	\$553,202.04



Memorandum

Idaho Home Energy Reporting Program Cost Effectiveness

Navigant estimated the cost-effectiveness results for the Idaho Home Energy Reporting Program, based on 2017 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program.

Cost-effectiveness was tested using the 2015 IRP east residential whole house 31% load factor decrement. The program passes the cost-effectiveness for all the tests except the RIM and PCT tests.

Table 1 - Home Energy Reporting Inputs

Table 2 – Home Energy Reporting Annual Program Costs

Table 3 – Home Energy Reporting Savings by Measure Category

Table 4 - Home Energy Reporting Program Level Cost-Effectiveness Results

Table 1 - Home Energy Reporting Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	11.47%
Residential Energy Rate (\$/kWh) ¹	\$0.1034
Inflation Rate	1.9%

¹ Future rates determined using a 1.9% annual escalator.

Table 2 – Home Energy Reporting Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Development	Incentives	Total Utility Costs	Gross Customer Costs
Home Energy Reports	\$0	\$11,569	\$122,502	\$750	\$0	\$134,821	\$0
Total	\$0	\$11,569	\$122,502	\$750	\$0	\$134,821	\$0

Table 3 – Home Energy Reporting Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Home Energy Reports	3,055,279	91%	2,780,304	100%	2,780,304	1
Total	3,055,279	91%	2,780,304	100%	2,780,304	1

**Table 4 - Home Energy Reporting Program Level Cost-Effectiveness Results
 (Decrement - East Res. Whole House - 31%, Load Shape – ID_Single_Family_Heat_Pump)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0508	\$134,821	\$160,081	\$25,260	1.19
Total Resource Cost Test (TRC) No Adder	\$0.0508	\$134,821	\$145,529	\$10,707	1.08
Utility Cost Test (UCT)	\$0.0508	\$134,821	\$145,529	\$10,707	1.08
Rate Impact Test (RIM)		\$427,767	\$145,529	-\$282,238	0.34
Participant Cost Test (PCT)		\$0	\$292,946	\$292,946	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000815357
Discounted Participant Payback (years)					n/a



Memorandum

Idaho Home Energy Savings Program Cost Effectiveness

Navigant estimated the cost-effectiveness results for the Idaho Home Energy Savings Program, based on 2017 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 8 measure categories.

Cost-effectiveness was tested using the 2015 IRP east residential whole house 31%, east residential lighting 47%, and east water heating – 53% decrements. The program passes the cost-effectiveness for the UCT test. The memo consists of the following tables.

Table 1 - Home Energy Savings Inputs
Table 2 – Home Energy Savings Annual Program Costs
Table 3 – Home Energy Savings – Savings by Measure Category
Table 4 - Benefit/Cost Ratios by Measure Category
Table 5 – Home Energy Savings Program Level (without NEBs) Cost-Effectiveness Results
Table 6 - Home Energy Savings Appliances Cost-Effectiveness Results
Table 7 - Home Energy Savings Building Shell Cost-Effectiveness Results
Table 8 - Home Energy Savings Energy Kits – DHW Cost-Effectiveness Results
Table 9 - Home Energy Savings Energy Kits – Lighting Cost-Effectiveness Results
Table 10 - Home Energy Savings HVAC Cost-Effectiveness Results
Table 11 - Home Energy Savings Lighting Cost-Effectiveness Results
Table 12 - Home Energy Savings Water Heating Cost-Effectiveness Results
Table 13 - Home Energy Savings Whole Home Cost-Effectiveness Results
Table 14 - Home Energy Savings Non-Energy Benefits by Measure
Table 15 - Home Energy Savings Program (with NEBs) Cost-Effectiveness Results
Table 16 - Home Energy Savings Appliances (with NEBs) Cost-Effectiveness Results
Table 17 - Home Energy Savings Energy Kit – DHW (with NEBs) Cost-Effectiveness Results
Table 18 - Home Energy Savings Energy Kit – Lighting (with NEBs) Cost-Effectiveness Results
Table 19 - Home Energy Savings Lighting (with NEBs) Cost-Effectiveness Results

Table 1 - Home Energy Savings Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	11.47%
Residential Energy Rate (\$/kWh) ¹	\$0.1034
Inflation Rate	1.90%

¹ Future rates determined using a 1.9% annual escalator.

Table 2 – Home Energy Savings Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Total Utility Costs	Gross Customer Costs
Appliances	\$0	\$150	\$2,951	\$55	\$7,300	\$10,456	\$14,072
Building Shell	\$0	\$89	\$1,752	\$33	\$9,655	\$11,530	\$17,678
Energy Kits - DHW	\$0	\$2,327	\$52,278	\$856	\$8,045	\$63,507	\$8,045
Energy Kits - Lighting	\$0	\$109	\$2,450	\$40	\$2,703	\$5,302	\$2,703
HVAC	\$0	\$4,881	\$95,968	\$1,796	\$94,840	\$197,484	\$140,938
Lighting	\$0	\$7,554	\$82,173	\$2,780	\$78,321	\$170,828	\$569,993
Water Heating	\$0	\$60	\$1,177	\$22	\$2,750	\$4,009	\$4,293
Whole Home	\$0	\$99	\$1,941	\$36	\$12,000	\$14,076	\$14,679
Total	\$0	\$15,269	\$240,690	\$5,618	\$215,614	\$477,192	\$772,402

Table 3 – Home Energy Savings – Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Appliances	21,005	100%	21,005	100%	21,005	13
Building Shell	12,475	100%	12,475	100%	12,475	45
Energy Kits - DHW	325,750	95%	309,462	95%	293,989	11
Energy Kits - Lighting	15,266	95%	14,503	95%	13,778	13
HVAC	683,139	49%	334,738	98%	328,043	17
Lighting	1,057,371	80%	845,897	47%	397,572	12
Water Heating	8,379	100%	8,379	100%	8,379	13
Whole Home	13,816	100%	13,816	100%	13,816	45
Total	2,137,201	73%	1,560,275	70%	1,089,057	14

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Appliances with NEBs	1.59	1.52	1.18	0.38	3.08
Appliances	0.79	0.72	1.18	0.38	2.10
Building Shell	0.82	0.75	1.27	0.39	2.00
Energy Kits with NEBs - DHW	4.55	4.31	2.34	0.44	52.24
Energy Kits - DHW	2.59	2.35	2.34	0.44	36.86
Energy Kits with NEBs - Lighting	2.98	2.81	1.68	0.45	8.74
Energy Kits - Lighting	1.90	1.73	1.68	0.45	6.67
HVAC	1.04	0.94	1.15	0.37	3.70
Lighting with NEBs	1.26	1.19	1.41	0.42	1.95
Lighting	0.74	0.67	1.41	0.42	1.62
Water Heating	0.98	0.89	1.23	0.38	2.70
Whole Home	1.12	1.02	1.21	0.40	2.75
Total with NEBs	1.47	1.38	1.41	0.40	2.86
Total	1.02	0.92	1.41	0.40	2.43

Table 5 – Home Energy Savings Program Level (without NEBs) Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0680	\$728,527	\$741,083	\$12,556	1.02
Total Resource Cost Test (TRC) No Adder	\$0.0680	\$728,527	\$673,712	-\$54,815	0.92
Utility Cost Test (UCT)	\$0.0446	\$477,192	\$673,712	\$196,520	1.41
Rate Impact Test (RIM)		\$1,664,968	\$673,712	-\$991,256	0.40
Participant Cost Test (PCT)		\$772,402	\$1,873,588	\$1,101,186	2.43
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000016706
Discounted Participant Payback (years)					5.35

Table 6 through Table 12 provides cost-effectiveness results without NEBs for all 8 measures.

**Table 6 - Home Energy Savings Appliances Cost-Effectiveness Results
 (Decrement - East Water Heating – 53%, Load Shape – Residential_ERWH_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0861	\$17,228	\$13,573	-\$3,655	0.79
Total Resource Cost Test (TRC) No Adder	\$0.0861	\$17,228	\$12,339	-\$4,889	0.72
Utility Cost Test (UCT)	\$0.0522	\$10,456	\$12,339	\$1,883	1.18
Rate Impact Test (RIM)		\$32,655	\$12,339	-\$20,315	0.38
Participant Cost Test (PCT)		\$14,072	\$29,499	\$15,426	2.10
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000004477
Discounted Participant Payback (years)					3.22

**Table 7 - Home Energy Savings Building Shell Cost-Effectiveness Results
 (Decrement - East Residential Whole House - 31%, Load Shape – ID_Single_Family_Heating)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0851	\$19,553	\$16,080	-\$3,473	0.82
Total Resource Cost Test (TRC) No Adder	\$0.0851	\$19,553	\$14,618	-\$4,934	0.75
Utility Cost Test (UCT)	\$0.0502	\$11,530	\$14,618	\$3,089	1.27
Rate Impact Test (RIM)		\$37,208	\$14,618	-\$22,589	0.39
Participant Cost Test (PCT)		\$17,678	\$35,333	\$17,655	2.00
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000001423
Discounted Participant Payback (years)					6.98

**Table 8 - Home Energy Savings Energy Kits – DHW Cost-Effectiveness Results
 (Decrement - East Water Heating - 53%, Load Shape – Residential_ERWH_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0255	\$63,105	\$163,267	\$100,162	2.59
Total Resource Cost Test (TRC) No Adder	\$0.0255	\$63,105	\$148,424	\$85,320	2.35
Utility Cost Test (UCT)	\$0.0257	\$63,507	\$148,424	\$84,917	2.34
Rate Impact Test (RIM)		\$337,537	\$148,424	-\$189,113	0.44
Participant Cost Test (PCT)		\$8,045	\$296,498	\$288,453	36.86
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000049331
Discounted Participant Payback (years)					n/a

**Table 9 - Home Energy Savings Energy Kits – Lighting Cost-Effectiveness Results
 (Decrement - East Residential Lighting - 47%, Load Shape – Residential_Lighting_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0393	\$5,167	\$9,815	\$4,648	1.90
Total Resource Cost Test (TRC) No Adder	\$0.0393	\$5,167	\$8,923	\$3,756	1.73
Utility Cost Test (UCT)	\$0.0404	\$5,302	\$8,923	\$3,621	1.68
Rate Impact Test (RIM)		\$19,862	\$8,923	-\$10,939	0.45
Participant Cost Test (PCT)		\$2,703	\$18,029	\$15,327	6.67
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000002411
Discounted Participant Payback (years)					n/a

**Table 10 - Home Energy Savings HVAC Cost-Effectiveness Results
 (Decrement - East Residential Whole House - 31%, Load Shape – ID_Single_Family_Heating)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0639	\$240,764	\$249,223	\$8,460	1.04
Total Resource Cost Test (TRC) No Adder	\$0.0639	\$240,764	\$226,567	-\$14,197	0.94
Utility Cost Test (UCT)	\$0.0524	\$197,484	\$226,567	\$29,082	1.15
Rate Impact Test (RIM)		\$615,569	\$226,567	-\$389,002	0.37
Participant Cost Test (PCT)		\$140,938	\$521,457	\$380,519	3.70
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000065350
Discounted Participant Payback (years)					1.35

**Table 11 - Home Energy Savings Lighting Cost-Effectiveness Results
 (Decrement - East Residential Lighting - 47%, Load Shape – Residential_Lighting_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1009	\$360,404	\$264,910	-\$95,494	0.74
Total Resource Cost Test (TRC) No Adder	\$0.1009	\$360,404	\$240,827	-\$119,577	0.67
Utility Cost Test (UCT)	\$0.0478	\$170,828	\$240,827	\$69,999	1.41
Rate Impact Test (RIM)		\$566,760	\$240,827	-\$325,933	0.42
Participant Cost Test (PCT)		\$569,993	\$920,729	\$350,736	1.62
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000077869
Discounted Participant Payback (years)					16.26

**Table 12 - Home Energy Savings Water Heating Cost-Effectiveness Results
(Decrement - East Water Heating - 53%, Load Shape – Residential_ERWH_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0695	\$5,552	\$5,414	-\$138	0.98
Total Resource Cost Test (TRC) No Adder	\$0.0695	\$5,552	\$4,922	-\$630	0.89
Utility Cost Test (UCT)	\$0.0502	\$4,009	\$4,922	\$913	1.23
Rate Impact Test (RIM)		\$12,864	\$4,922	-\$7,942	0.38
Participant Cost Test (PCT)		\$4,293	\$11,605	\$7,312	2.70
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000001750
Discounted Participant Payback (years)					1.78

**Table 13 - Home Energy Savings Whole Home Cost-Effectiveness Results
(Decrement - East Res. Whole House - 31%, Load Shape – ID_Single_Family_Heat_Pump)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0658	\$16,755	\$18,800	\$2,046	1.12
Total Resource Cost Test (TRC) No Adder	\$0.0658	\$16,755	\$17,091	\$337	1.02
Utility Cost Test (UCT)	\$0.0553	\$14,076	\$17,091	\$3,015	1.21
Rate Impact Test (RIM)		\$42,514	\$17,091	-\$25,423	0.40
Participant Cost Test (PCT)		\$14,679	\$40,438	\$25,760	2.75
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000001601
Discounted Participant Payback (years)					1.88

In addition to the energy benefits reported above, appliances, energy savings kits and lighting in the Home Energy Savings program offer significant non-energy benefits (NEBs). Table 14 through Table 19 detail the non-energy benefits and cost-effectiveness results.

Table 14 - Home Energy Savings Non-Energy Benefits by Measure

Measure Name	Non- Energy Benefits Water (\$/yr)	Non- Energy Benefits Other (\$/yr)	Quantity	Measure Life	Total NEBs (\$/yr)	Discount Rate	Total Net Present Value Benefits
Appliances	\$1,530	\$0	76	13.0	\$1,530	6.66%	\$13,901.51
Energy Kits - DHW	\$16,011	\$0	605	11.0	\$16,011	6.66%	\$130,251.11
Energy Kits - Lighting	\$0	\$648	466	13.0	\$648	6.66%	\$5,887.07
Lighting	\$0	\$46,731	61,305	12.0	\$46,731	6.66%	\$403,162.36

The following tables provide the cost-effectiveness results after adding in the non-energy benefits detailed above beginning with the overall program results.

Table 15 - Home Energy Savings Program (with NEBs) Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0680	\$728,527	\$1,073,802	\$345,276	1.47
Total Resource Cost Test (TRC) No Adder	\$0.0680	\$728,527	\$1,006,431	\$277,904	1.38
Utility Cost Test (UCT)	\$0.0446	\$477,192	\$673,712	\$196,520	1.41
Rate Impact Test (RIM)		\$1,664,968	\$673,712	-\$991,256	0.40
Participant Cost Test (PCT)		\$772,402	\$2,206,307	\$1,433,906	2.86
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000016706
Discounted Participant Payback (years)					5.35

**Table 16 - Home Energy Savings Appliances (with NEBs) Cost-Effectiveness Results
 (Decrement - East Water Heating - 53%, Load Shape – Residential_ERWH_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0861	\$17,228	\$27,475	\$10,246	1.59
Total Resource Cost Test (TRC) No Adder	\$0.0861	\$17,228	\$26,241	\$9,013	1.52
Utility Cost Test (UCT)	\$0.0522	\$10,456	\$12,339	\$1,883	1.18
Rate Impact Test (RIM)		\$32,655	\$12,339	-\$20,315	0.38
Participant Cost Test (PCT)		\$14,072	\$43,400	\$29,328	3.08
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000004477
Discounted Participant Payback (years)					3.22

**Table 17 - Home Energy Savings Energy Kit – DHW (with NEBs) Cost-Effectiveness Results
 (Decrement - East Water Heating - 53%, Load Shape – Residential_ERWH_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0255	\$63,105	\$287,005	\$223,901	4.55
Total Resource Cost Test (TRC) No Adder	\$0.0255	\$63,105	\$272,163	\$209,058	4.31
Utility Cost Test (UCT)	\$0.0257	\$63,507	\$148,424	\$84,917	2.34
Rate Impact Test (RIM)		\$337,537	\$148,424	-\$189,113	0.44
Participant Cost Test (PCT)		\$8,045	\$420,236	\$412,191	52.24
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000049331
Discounted Participant Payback (years)					n/a

**Table 18 - Home Energy Savings Energy Kit – Lighting (with NEBs) Cost-Effectiveness Results
(Decrement - East Residential Lighting - 47%, Load Shape – Residential_Lighting_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0393	\$5,167	\$15,408	\$10,241	2.98
Total Resource Cost Test (TRC) No Adder	\$0.0393	\$5,167	\$14,516	\$9,349	2.81
Utility Cost Test (UCT)	\$0.0404	\$5,302	\$8,923	\$3,621	1.68
Rate Impact Test (RIM)		\$19,862	\$8,923	-\$10,939	0.45
Participant Cost Test (PCT)		\$2,703	\$23,622	\$20,919	8.74
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000002411
Discounted Participant Payback (years)					n/a

**Table 19 - Home Energy Savings Lighting (with NEBs) Cost-Effectiveness Results
(Decrement - East Residential Lighting - 47%, Load Shape – Residential_Lighting_7P)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1009	\$360,404	\$454,396	\$93,992	1.26
Total Resource Cost Test (TRC) No Adder	\$0.1009	\$360,404	\$430,313	\$69,910	1.19
Utility Cost Test (UCT)	\$0.0478	\$170,828	\$240,827	\$69,999	1.41
Rate Impact Test (RIM)		\$566,760	\$240,827	-\$325,933	0.42
Participant Cost Test (PCT)		\$569,993	\$1,110,216	\$540,222	1.95
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000077869
Discounted Participant Payback (years)					16.26



Memorandum

Idaho Low Income Weatherization Program Cost Effectiveness

Navigant estimated the cost-effectiveness results for the Idaho Low Income Weatherization Program, based on 2017 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program.

Cost-effectiveness was tested using the 2015 IRP east residential whole house 31% load factor decrement. The program does not pass any of the cost-effectiveness tests.

Table 1 - Low Income Weatherization Inputs

Table 2 - Low Income Weatherization Annual Program Costs

Table 3 - Low Income Weatherization Savings by Measure Category

Table 4 - Benefit/Cost Ratios by Measure Category

Table 5 - Low Income Weatherization Program Level (without NEBs) Cost-Effectiveness

Table 6 - Low Income Weatherization Non-Energy Benefits

Table 7 - Low Income Weatherization Program (with NEBs) Level Cost-Effectiveness Results

Table 1 - Low Income Weatherization Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	11.47%
Residential Energy Rate (\$/kWh) ¹	\$0.1034
Inflation Rate	1.90%

¹ Future rates determined using a 1.90% annual escalator.

Table 2 - Low Income Weatherization Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Development	Incentives	Total Utility Costs	Gross Customer Costs
Low Income Weatherization	\$0	\$14,858	\$14,689	\$3,953	\$214,986	\$248,486	\$0
Total	\$0	\$14,858	\$14,689	\$3,953	\$214,986	\$248,486	\$0

Table 3 - Low Income Weatherization Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Low Income Weatherization	131,340	92%	120,833	100%	120,833	25
Total	131,340	92%	120,833	100%	120,833	25

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Low Income Weatherization with NEBs	1.45	1.41	0.46	0.26	n/a
Low Income Weatherization	0.51	0.46	0.46	0.26	n/a

Table 5 - Low Income Weatherization Program Level (without NEBs) Cost-Effectiveness (Decrement - East Res. Whole House - 31%, Load Shape – ID_Single_Family_Heat_Pump)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1424	\$248,486	\$125,542	-\$122,944	0.51
Total Resource Cost Test (TRC) No Adder	\$0.1424	\$248,486	\$114,129	-\$134,357	0.46
Utility Cost Test (UCT)	\$0.1424	\$248,486	\$114,129	-\$134,357	0.46
Rate Impact Test (RIM)		\$442,653	\$114,129	-\$328,524	0.26
Participant Cost Test (PCT)		\$0	\$409,153	\$409,153	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000037386
Discounted Participant Payback (years)					n/a

In addition to the energy benefits reported above, the Low Income program offers significant non-energy benefits (NEBs). Table 6 details the non-energy benefits and Table 7 provides the cost-effectiveness results.

Table 6 - Low Income Weatherization Non-Energy Benefits

Non-Energy Benefit	Program Impact	Perspective Adjusted
Health & Safety Benefit	\$143,417.40	PTRC, TRC
Payment Assistance	\$79,680.00	PTRC, TRC
Arrearage	\$12,240.00	PTRC, TRC
Total	\$235,337.40	-

**Table 7 - Low Income Weatherization Program (with NEBs) Level Cost-Effectiveness Results
 (Decrement - East Res. Whole House - 31%, Load Shape – ID_Single_Family_Heat_Pump)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1424	\$248,486	\$360,879	\$112,394	1.45
Total Resource Cost Test (TRC) No Adder	\$0.1424	\$248,486	\$349,466	\$100,981	1.41
Utility Cost Test (UCT)	\$0.1424	\$248,486	\$114,129	-\$134,357	0.46
Rate Impact Test (RIM)		\$442,653	\$114,129	-\$328,524	0.26
Participant Cost Test (PCT)		\$0	\$409,153	\$409,153	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000037386
Discounted Participant Payback (years)					n/a



Memorandum

Wattsmart Business Program Cost Effectiveness

Navigant estimated the cost-effectiveness results for the Idaho Wattsmart Business Program, based on 2017 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 13 measure categories.

Cost-effectiveness was tested using the 2015 IRP east commercial cooling – 14%, east commercial lighting – 53%, east residential – 9%, east water heating – 53%, east industrial – 40% decrements. The program passes PTRC, TRC, UCT and PCT cost-effectiveness tests. The memo consists of the following tables.

Table 1 - Utility Inputs

Table 2 – Annual Wattsmart Business Program Costs by Measure Category

Table 3 – Annual Wattsmart Business Program Savings by Measure Category

Table 4 - Benefit/Cost Ratios by Measure Category

Table 5 – Wattsmart Business Program Level Cost-Effectiveness Results

Table 6 - Wattsmart Business Appliances Cost-Effectiveness Results

Table 7 - Wattsmart Business Building Shell Cost-Effectiveness Results

Table 8 - Wattsmart Business Compressed Air Cost-Effectiveness Results

Table 9 - Wattsmart Business Direct Install Cost-Effectiveness Results

Table 10 - Wattsmart Business Energy Management Cost-Effectiveness Results

Table 11 - Wattsmart Business Energy Management Co-Funding Cost-Effectiveness Results

Table 12 - Wattsmart Business Farm & Dairy Cost-Effectiveness Results

Table 13 - Wattsmart Business Food Service Equipment Cost-Effectiveness Results

Table 14 - Wattsmart Business HVAC Cost-Effectiveness Results

Table 15 - Wattsmart Business Irrigation Cost-Effectiveness Results

Table 16 - Wattsmart Business Lighting Cost-Effectiveness Results

Table 17 - Wattsmart Business Motors Cost-Effectiveness Results

Table 18 - Wattsmart Business Refrigeration Cost-Effectiveness Results

Table 1 - Utility Inputs

Parameter	Value
Discount Rate	6.66%
Commercial Line Loss	10.75%
Industrial Line Loss	7.52%
Irrigation Line Loss	11.45%
Commercial Energy Rate (\$/kWh) ¹	\$0.0879
Industrial Energy Rate (\$/kWh) ¹	\$0.0644
Irrigation Energy Rate (\$/kWh) ¹	\$0.0917
Inflation Rate	1.90%

¹ Future rates determined using a 1.90% annual escalator.

Table 2 – Annual Wattsmart Business Program Costs by Measure Category

Measure Category	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Inspections	Incentives	Total Utility Costs	Gross Customer Costs
Additional Measures	\$2,085	\$444	\$0	\$244	\$0	\$7,338	\$10,111	\$19,912
Building Shell	\$532	\$197	\$1,478	\$139	\$0	\$15,067	\$17,412	\$28,416
Compressed Air	\$0	\$1,819	\$7,766	\$1,639	\$0	\$49,379	\$60,604	\$136,788
Direct Install	\$0	\$8,401	\$156,845	\$7,397	\$0	\$429,523	\$602,167	\$143,174
Energy Management	\$11,672	\$1,895	\$0	\$1,707	\$0	\$6,858	\$22,132	\$2,874
Energy Manager Co-Funding	\$12,814	\$0	\$0	\$0	\$0	\$67,772	\$80,586	\$0
Farm & Dairy	\$1,224	\$1,904	\$26,873	\$1,903	\$0	\$54,315	\$86,220	\$90,243
Food Service Equipment	\$0	\$73	\$1,602	\$66	\$0	\$650	\$2,391	\$838
HVAC	\$26,364	\$5,265	\$9,336	\$4,533	\$0	\$77,233	\$122,731	\$187,932
Irrigation	\$7,183	\$4,894	\$82,292	\$5,509	\$0	\$157,774	\$257,653	\$431,963
Lighting	\$62,862	\$33,688	\$422,577	\$25,070	\$63,623	\$552,486	\$1,160,307	\$1,746,483
Motors	\$8,802	\$2,123	\$6,109	\$1,267	\$0	\$36,457	\$54,757	\$255,832
Refrigeration	\$479	\$3,080	\$6,193	\$2,848	\$0	\$85,094	\$97,695	\$177,255
Total	\$134,016	\$63,785	\$721,072	\$52,322	\$63,623	\$1,539,948	\$2,574,766	\$3,221,711

Table 3 – Annual Wattsmart Business Program Savings by Measure Category

Measure Category	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Additional Measures	48,921	40%	19,568	82%	16,046	15
Building Shell	27,816	40%	11,126	82%	9,124	16
Compressed Air	329,195	100%	329,195	82%	269,940	15
Direct Install	1,485,445	90%	1,336,901	90%	1,203,211	12
Energy Management	342,880	83%	284,590	89%	253,285	3
Energy Manager Co-Funding	-	-	-	-	-	-
Farm & Dairy	382,158	100%	382,158	82%	313,370	14
Food Service Equipment	13,218	46%	6,073	84%	5,092	14
HVAC	910,211	100%	910,211	82%	746,373	15
Irrigation	1,106,213	100%	1,106,213	82%	907,095	9
Lighting	5,034,297	97%	4,883,268	86%	4,199,611	15
Motors	254,351	100%	254,351	82%	208,568	15
Refrigeration	571,982	98%	560,542	100%	560,542	15
Total	10,506,687	96%	10,084,197	86%	8,692,256	14

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Category	PTRC	TRC	UCT	RIM	PCT
Additional Measures	0.65	0.59	1.11	0.52	1.09
Building Shell	0.72	0.66	0.97	0.65	0.89
Compressed Air	1.74	1.58	3.22	0.59	2.76
Direct Install	2.90	2.63	1.32	0.49	10.83
Energy Management	3.06	2.79	2.24	0.57	27.82
Energy Manager Co-Funding	n/a	n/a	n/a	n/a	n/a
Farm & Dairy	2.17	1.97	2.42	0.55	4.59
Food Service Equipment	1.42	1.29	1.32	0.44	7.64
HVAC	7.28	6.62	10.77	1.55	5.14
Irrigation	3.29	2.99	5.27	1.51	2.17
Lighting	1.75	1.59	2.89	0.67	2.85
Motors	0.75	0.69	2.86	0.71	0.94
Refrigeration	2.63	2.39	4.65	0.67	3.77
Total	2.30	2.09	3.08	0.78	3.21

Table 5 – Wattsmart Business Program Level Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0447	\$3,790,056	\$8,710,125	\$4,920,069	2.30
Total Resource Cost Test (TRC) No Adder	\$0.0447	\$3,790,056	\$7,918,295	\$4,128,239	2.09
Utility Cost Test (UCT)	\$0.0304	\$2,574,766	\$7,918,295	\$5,343,530	3.08
Rate Impact Test (RIM)		\$10,168,131	\$7,918,295	-\$2,249,836	0.78
Participant Cost Test (PCT)		\$3,221,711	\$10,340,189	\$7,118,479	3.21
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000040758
Discounted Participant Payback (years)					2.34

Table 6 through Table 18 provide cost-effectiveness results for all 13 measures.

**Table 6 - Wattsmart Business Additional Measures Cost-Effectiveness Results
 (Decrement - East Industrial - 40%, Load Shape – ID_Miscellaneous_Mfg_General)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1128	\$19,101	\$12,396	-\$6,705	0.65
Total Resource Cost Test (TRC) No Adder	\$0.1128	\$19,101	\$11,269	-\$7,832	0.59
Utility Cost Test (UCT)	\$0.0597	\$10,111	\$11,269	\$1,157	1.11
Rate Impact Test (RIM)		\$21,810	\$11,269	-\$10,541	0.52
Participant Cost Test (PCT)		\$19,912	\$21,605	\$1,693	1.09
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000002010
Discounted Participant Payback (years)					16.69

**Table 7 - Wattsmart Business Building Shell Cost-Effectiveness Results
 (Decrement - East Commercial Cooling - 14%, Load Shape – ID_School_Space_Cool)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.2550	\$25,646	\$18,485	-\$7,162	0.72
Total Resource Cost Test (TRC) No Adder	\$0.2550	\$25,646	\$16,804	-\$8,842	0.66
Utility Cost Test (UCT)	\$0.1731	\$17,412	\$16,804	-\$608	0.97
Rate Impact Test (RIM)		\$25,791	\$16,804	-\$8,987	0.65
Participant Cost Test (PCT)		\$28,416	\$25,285	-\$3,131	0.89
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000001605
Discounted Participant Payback (years)					32.53

**Table 8 - Wattsmart Business Compressed Air Cost-Effectiveness Results
(Decrement - East Industrial - 40%, Load Shape – ID_Miscellaneous_Mfg_General)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0433	\$123,391	\$214,788	\$91,397	1.74
Total Resource Cost Test (TRC) No Adder	\$0.0433	\$123,391	\$195,261	\$71,870	1.58
Utility Cost Test (UCT)	\$0.0213	\$60,604	\$195,261	\$134,657	3.22
Rate Impact Test (RIM)		\$329,228	\$195,261	-\$133,967	0.59
Participant Cost Test (PCT)		\$136,788	\$376,970	\$240,182	2.76
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000025547
Discounted Participant Payback (years)					3.86

**Table 9 - Wattsmart Business Direct Install Cost-Effectiveness Results
(Decrement - East Commercial Lighting - 53%, Load Shape – ID_Large_Office_Lighting)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0279	\$301,500	\$873,285	\$571,785	2.90
Total Resource Cost Test (TRC) No Adder	\$0.0279	\$301,500	\$793,896	\$492,396	2.63
Utility Cost Test (UCT)	\$0.0557	\$602,167	\$793,896	\$191,729	1.32
Rate Impact Test (RIM)		\$1,610,944	\$793,896	-\$817,048	0.49
Participant Cost Test (PCT)		\$143,174	\$1,550,387	\$1,407,213	10.83
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000195202
Discounted Participant Payback (years)					n/a

**Table 10 - Wattsmart Business Energy Management Cost-Effectiveness Results
(Decrement - East Industrial - 40%, Load Shape – ID_Miscellaneous_HVAC_Aux)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0257	\$17,833	\$54,639	\$36,807	3.06
Total Resource Cost Test (TRC) No Adder	\$0.0257	\$17,833	\$49,672	\$31,839	2.79
Utility Cost Test (UCT)	\$0.0319	\$22,132	\$49,672	\$27,540	2.24
Rate Impact Test (RIM)		\$87,200	\$49,672	-\$37,528	0.57
Participant Cost Test (PCT)		\$2,874	\$79,968	\$77,094	27.82
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000036099
Discounted Participant Payback (years)					n/a

**Table 11 - Wattsmart Business Energy Management Co-Funding Cost-Effectiveness Results
 (Decrement – n/a, Load Shape – n/a)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	n/a	\$12,814	\$0	-\$12,814	n/a
Total Resource Cost Test (TRC) No Adder	n/a	\$12,814	\$0	-\$12,814	n/a
Utility Cost Test (UCT)	n/a	\$80,586	\$0	-\$80,586	n/a
Rate Impact Test (RIM)		\$80,586	\$0	-\$80,586	n/a
Participant Cost Test (PCT)		\$0	\$67,772	\$67,772	n/a
Lifecycle Revenue Impacts (\$/kWh)					n/a
Discounted Participant Payback (years)					n/a

**Table 12 - Wattsmart Business Farm & Dairy Cost-Effectiveness Results
 (Decrement - East Industrial - 40%, Load Shape – ID_Miscellaneous_Mfg_General)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0346	\$105,904	\$229,731	\$123,827	2.17
Total Resource Cost Test (TRC) No Adder	\$0.0346	\$105,904	\$208,846	\$102,942	1.97
Utility Cost Test (UCT)	\$0.0282	\$86,220	\$208,846	\$122,626	2.42
Rate Impact Test (RIM)		\$381,115	\$208,846	-\$172,269	0.55
Participant Cost Test (PCT)		\$90,243	\$413,943	\$323,700	4.59
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000035225
Discounted Participant Payback (years)					1.27

**Table 13 - Wattsmart Business Food Service Equipment Cost-Effectiveness Results
 (Decrement - East Water Heating - 53%, Load Shape – ID_Grocery_Water_Heat)**

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0477	\$2,443	\$3,461	\$1,018	1.42
Total Resource Cost Test (TRC) No Adder	\$0.0477	\$2,443	\$3,146	\$703	1.29
Utility Cost Test (UCT)	\$0.0467	\$2,391	\$3,146	\$756	1.32
Rate Impact Test (RIM)		\$7,217	\$3,146	-\$4,071	0.44
Participant Cost Test (PCT)		\$838	\$6,406	\$5,568	7.64
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000000832
Discounted Participant Payback (years)					0.41

Table 14 - Wattsmart Business HVAC Cost-Effectiveness Results
(Decrement - East Commercial Cooling - 14%, Load Shape – ID_School_Space_Cool)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0253	\$199,602	\$1,453,985	\$1,254,383	7.28
Total Resource Cost Test (TRC) No Adder	\$0.0253	\$199,602	\$1,321,804	\$1,122,203	6.62
Utility Cost Test (UCT)	\$0.0156	\$122,731	\$1,321,804	\$1,199,074	10.77
Rate Impact Test (RIM)		\$851,046	\$1,321,804	\$470,759	1.55
Participant Cost Test (PCT)		\$187,932	\$965,422	\$777,490	5.14
Lifecycle Revenue Impacts (\$/kWh)					-\$0.0000089774
Discounted Participant Payback (years)					1.72

Table 15 - Wattsmart Business Irrigation Cost-Effectiveness Results
(Decrement – East Residential Cooling - 9%, Load Shape – ID_Irrigation_General)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0697	\$454,088	\$1,494,063	\$1,039,975	3.29
Total Resource Cost Test (TRC) No Adder	\$0.0697	\$454,088	\$1,358,239	\$904,151	2.99
Utility Cost Test (UCT)	\$0.0395	\$257,653	\$1,358,239	\$1,100,586	5.27
Rate Impact Test (RIM)		\$897,597	\$1,358,239	\$460,642	1.51
Participant Cost Test (PCT)		\$431,963	\$938,194	\$506,231	2.17
Lifecycle Revenue Impacts (\$/kWh)					-\$0.0000147089
Discounted Participant Payback (years)					3.42

Table 16 - Wattsmart Business Lighting Cost-Effectiveness Results
(Decrement - East Commercial Lighting - 53%, Load Shape – ID_Large_Office_Lighting)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0476	\$2,109,796	\$3,683,952	\$1,574,156	1.75
Total Resource Cost Test (TRC) No Adder	\$0.0476	\$2,109,796	\$3,349,047	\$1,239,251	1.59
Utility Cost Test (UCT)	\$0.0262	\$1,160,307	\$3,349,047	\$2,188,740	2.89
Rate Impact Test (RIM)		\$4,973,121	\$3,349,047	-\$1,624,074	0.67
Participant Cost Test (PCT)		\$1,746,483	\$4,985,991	\$3,239,508	2.85
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000309711
Discounted Participant Payback (years)					3.71

Table 17 - Wattsmart Business Motors Cost-Effectiveness Results
(Decrement - East Industrial - 40%, Load Shape – ID_Industrial_Machinery_General)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1017	\$228,082	\$172,093	-\$55,989	0.75
Total Resource Cost Test (TRC) No Adder	\$0.1017	\$228,082	\$156,448	-\$71,634	0.69
Utility Cost Test (UCT)	\$0.0244	\$54,757	\$156,448	\$101,691	2.86
Rate Impact Test (RIM)		\$221,811	\$156,448	-\$65,363	0.71
Participant Cost Test (PCT)		\$255,832	\$240,181	-\$15,650	0.94
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000012465
Discounted Participant Payback (years)					24.13

Table 18 - Wattsmart Business Refrigeration Cost-Effectiveness Results
(Decrement - East Industrial – 40%, Load Shape – ID_Miscellaneous_Refrigeration)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0309	\$189,856	\$499,249	\$309,393	2.63
Total Resource Cost Test (TRC) No Adder	\$0.0309	\$189,856	\$453,863	\$264,007	2.39
Utility Cost Test (UCT)	\$0.0159	\$97,695	\$453,863	\$356,167	4.65
Rate Impact Test (RIM)		\$680,665	\$453,863	-\$226,802	0.67
Participant Cost Test (PCT)		\$177,255	\$668,064	\$490,809	3.77
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000043251
Discounted Participant Payback (years)					1.86



Appendix 2

Program Expenditures by Category 2017

2017 Program	Admin - Prog Delivery Total	Admin - Utility Total	Customer Incentive Total	Dealer/Trade Ally Incentive Total	Engineering Total	Evaluation Total	Inspection Total	Marketing Total	Prog Devel Total	Total Program
Home Energy Reporting	\$ 122,502	\$ 11,569	\$ -	\$ -	\$ -	\$ 593	\$ -	\$ -	\$ 158	\$ 134,821
Home Energy Savings	\$ 240,690	\$ 15,269	\$ 59,353	\$ 156,261	\$ -	\$ 2,176	\$ -	\$ 1,300	\$ 2,142	\$ 477,192
Low Income Weatherization	\$ 14,689	\$ 14,858	\$ 214,986	\$ -	\$ -	\$ 3,318	\$ -	\$ 599	\$ 35	\$ 248,486
Low Income Education	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000
Portfolio Evaluation - Residential	\$ 215,231	\$ 20,661	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 235,892
wattsmart Business - Agricultural	\$ 9,976	\$ 6,128	\$ 199,637	\$ -	\$ 8,994	\$ -	\$ 4,207	\$ -	\$ -	\$ 228,943
wattsmart Business - Commercial	\$ 49,847	\$ 39,145	\$ 1,055,169	\$ -	\$ 63,146	\$ -	\$ 46,924	\$ -	\$ -	\$ 1,254,232
wattsmart Business - Industrial	\$ -	\$ 18,511	\$ 285,142	\$ -	\$ 61,876	\$ -	\$ 12,492	\$ -	\$ -	\$ 378,020
wattsmart Business - Portfolio	\$ 669,760	\$ -	\$ -	\$ -	\$ -	\$ 2,450	\$ -	\$ 32,840	\$ 8,520	\$ 713,570
Portfolio Evaluation - C&I	\$ 122,070	\$ 11,369	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 133,439
Portfolio - DSM Central	\$ 8,382	\$ 982	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,364
Portfolio - TRL	\$ -	\$ 1,789	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,789
Portfolio - Potential Study	\$ 6,727	\$ 707	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,434
Outreach & Comm - wattsmart	\$ -	\$ 431	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190,317	\$ -	\$ 190,748
Total	\$ 1,459,874	\$ 166,420	\$ 1,814,287	\$ 156,261	\$ 134,016	\$ 8,537	\$ 63,623	\$ 225,057	\$ 10,855	\$ 4,038,931



Appendix 3

Idaho Energy Efficiency Measure Installation Verifications

Idaho Measure Installation Verifications

Low Income Weatherization

All projects

- All measures are qualified through US Department of Energy approved audit tool.
- 100 percent inspection by agency inspector of all homes treated, reconciling work completed and quality (corrective action includes measure verification) prior to invoicing Company.
- Community Action Partnership Association of Idaho (CAPAI) follows with random inspections.
- Company program manager and/or inspector joins CAPAI and state inspectors during their monitoring session provided their random selection of homes includes dwellings funded by Rocky Mountain Power.

Home Energy Savings

Site inspections are performed by Program Administrator staff for the following retrofit measures. Inspections are performed on ≥ 5 percent of single family homes, ≥ 5 percent of manufactured homes, and 100 percent of multifamily projects.

- Duct sealing
- Duct sealing and insulation
- Ductless heat pumps
- Gas furnace with electrically commutated motor (ECM)
- Ground source heat pumps
- Heat pumps
- Heat pump best practices installation and proper sizing
- Heat pump tune-ups
- Heat pump water heaters
- Insulation
- Windows

Site inspections are not conducted for the following measures. However, all post-purchase incented measures undergo a quality assurance review prior to the issuance of the customer/dealer incentive and recording of savings (e.g. proof of purchase receipt review) and eligible equipment review. Additionally, customer account and customer address are checked to ensure the Company does not double pay for the same measure or double count measure savings.

- Central air conditioners
- Clothes washers
- Evaporative coolers
- Freezers
- Refrigerators
- Smart Thermostats

Site inspections are not conducted for the following measures, which are delivered via an upstream, manufacturer buy-down model. Promotion agreement contracts are signed with manufacturers and retailers to set incentive levels, final product prices, and limits to the total number of units that can be purchased per customer. Program Administrator verifies measures for product eligibility and correct pricing. Pricing is also verified by Program Administrator field visits to retail locations.

- LED bulbs
- Light fixtures
- Room air conditioners
- Advanced power strips

Customer eligibility for *wattsmart* Starter Kits is verified using the customer's account number and last name, and cross-verifying with the current PacifiCorp customer database.

wattsmart Business

For projects delivered by third party program administrator

Lighting projects

- Retrofits - 100 percent pre- and post-installation site inspections by third party consultant of all projects with incentives over a specified dollar amount. Project cost documentation reviewed for all projects.
- New construction - 100 percent post-installation site inspections by third party consultant of all projects with incentives over a specified dollar amount.
- A percent of post-installation site inspections by program administrator of projects with incentives under a specified dollar amount.

Non-lighting projects (typical upgrades/listed measures, custom measures)

- 100 percent of applications with an incentive that exceeds a specified dollar amount will be inspected (via site inspection) by program administrator.
- A minimum of a specified percent of remaining non-lighting applications will be inspected, either in person or via telephone interview, by program administrator.

For Company in-house project manager delivered projects

Lighting and non-lighting

- 100 percent pre/post-installation site inspections by third party consulting engineering firms, invoice reconciled to inspection results.
- No pre-inspection for new construction

All Programs

As part of the third-party program evaluations (two-year cycle) process, the Company has implementing semi-annual customer surveys to collect evaluation-relevant data, more frequently to cure for memory loss and other detractors such as customers moving and data not be readily available at evaluation time. This will serve as a further check verifying customer participation and measures installed.

Additional record reviews and site inspections (including metering/data logging) is conducted as part of the process and impact evaluations, a final verification of measure installations.



Appendix 4

Home Energy Savings Retailers 2017

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Table 1: 2017 Participating Midstream/Upstream Retailers

Retailer	City	State	LEDs	Fixtures
Ace Hardware #14355	Rexburg	ID	X	X
Ace Hardware #15881	Lava Hot Spring	ID	X	
Ace Hardware 15551	Saint Anthony	ID	X	
Broulim's Fresh Foods #1	Montpelier	ID	X	
Broulim's Fresh Foods #2	Rexburg	ID	X	X
Costco #1033	Pocatello	ID	X	x
Do It Best - Malad City	Malad City	ID	X	x
Dollar Tree #2762	Pocatello	ID	x	
Dollar Tree #3691	Rexburg	ID	x	
Downey Food Center #1	Downey	ID	x	
Home Depot #1807	Chubbuck	ID	x	X
Kroger – Fred Meyer #70100260	Pocatello	ID	X	
Lowe's #2587	Pocatello	ID	X	
Stokes Marketplace	Preston	ID	x	
Thomas Market Inc. #1	Malad City	ID	x	
True Value Agri - Service	Terreton	ID	x	X
True Value Hardware #10217	Montpelier	ID	x	
Wal-Mart - Supercenter #1995	Chubbuck	ID	x	
Wal-Mart #1878	Rexburg	ID	x	x
Wal-Mart #1905	Blackfoot	ID	x	X

Table 2: 2017 Participating Downstream Retailers

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Smart Thermostat	Evaporative Cooler - Tier 2	Heat Pump Water Heater	Windows	No Redemptions in 2017
Ace Hardware #14165	Idaho Falls	ID		x				
Ace Hardware #14355	Rexburg	ID						x
Best Buy #944	Idaho Falls	ID	x					
Bingham & Sons Furniture and Appliance	Rexburg	ID						x
D & D Electric	Rexburg	ID						x
Darnell Weekes Electric Inc	Rexburg	ID						x
Denning's Showkase	Idaho Falls	ID	x					
Do It Best	Rigby	ID						x
Dollar Tree #3691	Rexburg	ID						x
Electrical Wholesale Supply	Rexburg	ID						x
Home Depot #1802	Idaho Falls	ID	x	x	x	x	x	
Home Depot #4414	Logan	UT		x				
Kohl's - Ammon	Ammon	ID		x				
Lowe's #1501	Logan	UT	x					
Lowe's #1906	Idaho Falls	ID	x	x	x	x		
Lowe's of Pocatello	Pocatello	ID	x	x		x	x	
Rocknacks Hardware Plus	Idaho Falls	ID						x
Sears #5578	Logan	UT	x					
Sears #2278	Idaho Falls	ID	x					
Sears #3290	Rexburg	ID	x					
True Value Hardware #10217	Montpelier	ID						x
Wal-Mart #1902	Ammon	ID						x
Wal-Mart #5494	Idaho Falls	ID						x

*Retailers located in Utah but participated in the program

Table 3: 2017 Non-Participating Downstream Retailers

Redemptions from Non-Participating Retailer's (Retailer may not be located in the service territory)	City	State	Clothes Washer	Clothes Dryer	Smart Thermostat	Heat Pump Water Heater	Insulation-Attic	Insulation-Attic, Self-Installed	Windows
Alside Supply Center	SLC	UT							x
Amazon.com	Online	N/A			x				
B&B Specialties, LLC	Preston	ID					x		
BestBuy.com	Online	N/A			x				
Drawknife Designs	Terreton	ID							x
E-Bay	Online	N/A			x				
Home Depot #1807	Chubbuck	ID						x	
HomeDepot.com	Online	N/A			x				
J & B Superior Exteriors	Idaho Falls	ID							x
John's Paint & Glass, Inc	Montpelier	ID							x
Kohls.com	Online	N/A			x				
Lowe's.com	Online	N/A	x						
Pella Mountain West	Chandler	AZ							x
Pocatello Electric Co.	Pocatello	ID	x						
RC Willey Appliances	Meridian	ID	x						
Sears.com	Online	N/A	x						
The Home Depot, Inc.	Atlanta	GA				x			

Table 4: 2017 Participating Idaho HVAC Trade Allies

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Equipment	Duct Sealing & Insulation	Efficient Gas Furnace with ECM	Electric System to Ground Source Heat Pump Conversion	Electric System to Heat Pump Conversion	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade -	Heat Pump Best Practice Installation & Sizing	Heat Pump, Ductless	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	No Redemptions in 2017
Advanced Home Services	Rigby	ID												x
Alpha Mechanical Heating & AC	Idaho Falls	ID												x
Alpine Heating	Idaho Falls	ID			x	x					x			
Aspen Air Design	Malad	ID									x			
Conan Heating Inc.	Idaho Falls	ID			x									
Doug's Repair	Rexburg	ID												x
Excellence Heating & Cooling	Idaho Falls	ID												x
First Call Jewel Inc.	Idaho Falls	ID			x	x				x	x			
High Tech Comfort	Aberdeen	ID									x			
Housley Pumps Inc	St. Anthony	ID									x			
Mathews Plumbing & Heating, Inc	Shelley	ID												x
Modern Plumbing Heating & Electric	Rigby	ID												x
Right Now, Inc	Caldwell	ID				x					x			
Semrad Service & Repair	Malad	ID												x
Sermon Service & Electric	Idaho Falls	ID												x

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Equipment	Duct Sealing & Insulation	Efficient Gas Furnace with ECM	Electric System to Ground Source Heat Pump Conversion	Electric System to Heat Pump Conversion	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade -	Heat Pump Best Practice Installation & Sizing	Heat Pump, Ductless	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	No Redemptions in 2017
Sprinter Heating and Hydronics	Rigby	ID				x								
Superior Appliance Repair Service LLC	Pocatello	ID												x
Vogt's Heating and Air	Pocatello	ID									x			
Wiemer Heating	Idaho Falls	ID		x										
Young Electric, Heating, and Air	Idaho Falls	ID												x

Table 5: 2017 Participating Idaho Weatherization Trade Allies

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Insulation-Attic	Insulation-Floor	Insulation-Wall	Windows	No Redemptions in 2017
Advanced Insulation	Idaho Falls	ID	x		x		
BMC West	Idaho Falls	ID	x				
Campbell's Quality Exteriors	Idaho Falls	ID				x	
Chris Kent Inc	Idaho Falls	ID				x	
Green Acres Home Improvement	Idaho Falls	ID					x
High Country Glass & Mirror, Inc.	St. Anthony	ID					x
Johnson Brothers Planning Mill, Inc	Idaho Falls	ID					x
K-Designers	Billings	MT				x	
Lott Builders	Soda Springs	ID	x				
Synergy Efficiency LLC	Chubbuck	ID	x				
USI Cardalls LLC	Logan	UT			x		
Valley Glass	Idaho Falls	ID				x	

Table 6: 2017 Participating Idaho Manufactured Homes Trade Allies

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Manufactured Homes Duct Sealing	No redemptions in 2017
Home Energy Experts	Centerville	UT	x	
Synergy Efficiency LLC	Chubbuck	ID	x	



Appendix 5

wattsmart Business Energy Efficiency Alliance

wattsmart® Business Vendor Network



The following is a list of contractors, distributors, manufacturers and other vendors participating in Rocky Mountain Power's wattsmart® Business Vendor Network displayed in random order (unless sorted by the user) based on the search criteria selected. This listing is provided solely as a convenience to our customers. Rocky Mountain Power does not warrant or guarantee the work performed by these participating vendors. You are solely responsible for any contract with a participating vendor and the performance of any vendor you have chosen.

Search Criteria:

State(s) [Idaho]
Program(s) [Commercial]
Specialties [Appliances, Building envelope, Compressed air, Controls, Farm and dairy, Food service, HVAC - evaporative, HVAC - unitary, HVAC check-up, HVAC instant incentives, Irrigation, Lighting, Lighting instant incentives, Motors and VFDs, Office equipment, Other Specialty]

Service Address

Business Name

Search Results: 25 record(s) found

Company name	Contact information	Specialty	Projects completed	Distance (miles)
LMS Address: 663 West 4330 South Salt Lake City, UT 84123 Website: http://www.lmslighting.com	Phone: 801-281-0400 Name: Chris Munford Email: cmunford@lmslighting.com	Lighting	88	
HC Design Address: 614 Ferguson Avenue, Ste. 1 Bozeman, MT 59718 Website: http://www.h-cdesign.com	Phone: 406-522-7700 Name: Michael Miles Email: michael@h-cdesign.com	Food service		
Osram Address: 200 Ballardvale Street Wilmington, MA 01887 Website: http://www.osram.us/ls	Phone: 858-386-2849 Name: Nancy Burgin Email: nancy.burgin@osram.com	Controls, HVAC - evaporative, HVAC - unitary, Lighting, Motors and VFDs		
D&S Electrical Address: 455 South Eastern Avenue Idaho Falls, ID 83402 Website: http://www.d-s.com/index.html	Phone: 208-731-3701 Name: Dave Bennett Email: davebennett@d-s.com	Lighting, Motors and VFDs	8	

wattsmart® Business Vendor Network



ESS Address: 1037 E 1400 N Shelley, ID 83274 Website:	Phone: 208-251-6022 Name: Brent Purcell Email: brentjp@msn.com	Lighting	2
Electrical Wholesale Supply Address: 1355 Fremont Ave Idaho Falls, ID 83402 Website: http://electricalwholesalesupply.com/	Phone: 208-523-2300 Name: Troy Joslin Email: troy.joslin@homelightingcenter.com	Controls, Lighting	
Lennox Industries Inc. Address: 1008 W 2780 S Salt Lake City, UT 84119 Website: http://www.lennoxcommercial.com	Phone: 801-973-8889 Name: Jeff Barrett Email: jeff.barrett@lennoxind.com	HVAC - unitary	4
CED - Idaho Falls Address: 1305 South Utah Avenue Idaho Falls, ID 83402 Website: https://ced-if.shopced.com	Phone: 208-523-2022 Name: Julian Abrajan Email: jabrajan@cedidahofalls.com	Controls, Lighting, Lighting instant incentives	4
Relevant Solutions Address: 3186 Washington Street Salt Lake City, UT 84115 Website: http://www.relevantsolutions.com	Phone: 801-214-3317 Name: Alan Sweatfield Email: alan.sweatfield@relevantsolutions.com	Controls, Motors and VFDs	
Clark's Quality Roofing, Inc. Address: 334 West Anderson Avenue Murray, UT 84107 Website: http://www.clarkroof.com	Phone: 801-266-3575 Name: Hilary Clark Email: hilaryc@clarkroof.com	Building envelope	3
Automated Mechanical Address: 1574 West 2650 South Ogden, UT 84010 Website: http://www.automatedmechanical.com	Phone: 801-525-9500 Name: Thomas Mudge Email: tmudge@automatedmechanical.com	Controls, HVAC - evaporative, HVAC - unitary, HVAC check-up, Motors and VFDs	10
Platt Electric Supply- Pocatello Midstream Address: 2815 Garrett Way A Pocatello, ID 83201 Website:	Phone: 208-233-2002 Name: Mark Steed Email: mark.steed@platt.com	Lighting instant incentives	
Elite Energy Solutions Address: 162 S 1900 W Suite 100 Lindon, UT 84042 Website: http://www.eliteenergysolutions.com	Phone: 801-640-9779 Name: Chet Stevens Email: cstevens@elitees.net	Building envelope	42

wattsmart® Business Vendor Network



Bright Star Property Services Address: 214 S Cole Rd Boise, ID 83709 Website: http://www.brightstarps.com/	Phone: 208-922-6460 Name: Jennifer Jennifer Gamble Email: JenniferS@BrightStarPS.com	Lighting	1
ESL Vision Address: 1136 south 3600 West Salt Lake City, UT 84104 Website: http://www.eslvision.com	Phone: 801-866-3095 Name: Karen Young Email: karen.young@eslvision.com	Lighting	1
Brilliant Lighting Center Address: 1964 N 400 E North Ogden, UT 84414 Website: http://www.brilliantlightingcenter.com	Phone: 435-327-1020 Name: Mark Miller Email: mcm605@gmail.com	Lighting, Lighting instant incentives	4
Platt Electric Supply - Rexburg Address: 191 Airport Road Rexburg, ID 83440 Website: https://www.platt.com/	Phone: 208-356-0808 Name: Jason Evans Email: mgr88@platt.com	Lighting, Lighting instant incentives, Other Specialty	1
Harris Lighting Products Address: 1405 west 800 north Preston, ID 83263 Website: http://www.haleymhamblin.wixsite.com/harrislp	Phone: 208-852-2890 Name: Chase Harris Email: chase@harrislightingproducts.com	Controls, Lighting	
BriteSwitch, LLC Address: 195 Nassau St, Ste 13 Princeton, NJ 08542 Website: http://www.briteswitch.com	Phone: 609-945-5349 Name: Laura Oliver Email: laura.oliver@briteswitch.com	Controls, Lighting	2
Comfort Solutions Address: 1470 Wall Ave Ogden, UT 84404 Website: http://www.comfortsolutionsutah.com	Phone: 801-393-2206 Name: Adam Yearsley Email: adam@comfortsolutionsutah.com	HVAC - unitary, HVAC instant incentives	
Trane Address: 2817 South 1030 West Salt Lake City, UT 84119 Website: http://www.trane.com	Phone: 801-415-2032 Name: Mario Maestas Email: mmas@trane.com	Building envelope, Compressed air, Controls, HVAC - evaporative, HVAC - unitary, Motors and VFDs, Other Specialty	
CED- Logan Address: 636 N. 600 W. Logan, UT 84321 Website: http://cedlogan.shopced.com	Phone: 435-752-8905 Name: Devin Migliori Email: devinm@cedlogan.com	Farm and dairy, Irrigation, Lighting, Lighting instant incentives	20
Platt Electric Supply - Idaho Falls Address: 3020 S Yellowstone Hwy Idaho Falls, ID 83402 Website:	Phone: 801-597-0867 Name: Joey Golden Email: Joey.golden@platt.com	Lighting, Lighting instant incentives	3

wattsmart® Business Vendor Network



Optica Lighting

Address: 1772 Ross Dr
Ogden, UT 84403
Website:
<http://www.opticalighting.com>

Phone: 801-510-6314
Name: Mike Walsh
Email: mike@opticalighting.com

Lighting

8

VBFA

Address: 330 South 300 E
Salt Lake City, UT 84111
Website: [HTTP://www.vbfa.com](http://www.vbfa.com)

Phone:
Name: Ryan Van Voast
Email: rvanvoast@vbfa.com

Controls, HVAC - unitary, Lighting,
Other Specialty



Appendix 6

Idaho Measures

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
Measure Category : Appliances					
Clothes Washers:Clothes Washer - Electric DHW & Electric		Residential			
Clothes Washers - CEE Tier 2 and Above - Electric DHW & Electric Dryer - ID	Energy efficient clothes washer	01/30/2016	RTF Deemed	153	Measure
Clothes Washers - CEE Tier 3 - Electric DHW & Electric Dryer - ID	Energy efficient clothes washer	01/30/2016	RTF Deemed	180	Measure
Clothes Washers:Clothes Washer - Electric DHW & Gas Dryer		Residential			
Clothes Washers - CEE Tier 2 - Electric DHW & Gas Dryer - ID	Energy efficient clothes washer	01/29/2016	RTF Deemed	84.1	Measure
Clothes Washers - CEE Tier 3 - Electric DHW & Gas Dryer - ID	Energy efficient clothes washer	01/29/2016	RTF Deemed	102	Measure
Clothes Washers:Clothes Washer - Gas DHW & Electric Dryer		Residential			
Clothes Washers - CEE Tier 2 - Gas DHW & Electric Dryer - ID	Energy efficient clothes washer	01/29/2016	RTF Deemed	67.01	Measure
Clothes Washers - CEE Tier 3 - Gas DHW & Electric Dryer - ID	Energy efficient clothes washer	01/29/2016	RTF Deemed	76.98	Measure
Water Heater:Heat Pump Water Heater		Residential			
HPWH Tier 1 Basement 0-55gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
HPWH Tier 1 Basement 0-55gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
HPWH Tier 1 Garage 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure
HPWH Tier 1 Garage 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure
HPWH Tier 1 Indoor Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure
HPWH Tier 1 Indoor Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure
HPWH Tier 1 Indoor Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure
HPWH Tier 1 Indoor Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure
HPWH Tier 1 Indoor Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
HPWH Tier 1 Indoor Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
Measure Category : Building Shell					
Insulation:Attic Insulation		Residential			
Insulation - Attic - Electric FAF Heating System - ID	Install attic insulation - Contractor	01/30/2016	RTF Deemed	0.64	Sq. ft.
Insulation - Attic - Electric Heat Pump Heating System - ID	Install attic insulation - Contractor	01/30/2016	RTF Deemed	0.35	Sq. ft.
Insulation - Attic - Electric Zonal Heating System - ID	Install attic insulation - Contractor	01/30/2016	RTF Deemed	0.5	Sq. ft.
Insulation - Attic - Self Install - Electric FAF Heating System - ID	Install attic insulation - Self-install	01/30/2016	RTF Deemed	0.64	Sq. ft.

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
Insulation - Attic - Self Install - Electric Heat Pump Heating System - ID	Install attic insulation - Self-install	01/30/2016	RTF Deemed	0.35	Sq. ft.
Insulation - Attic - Self Install - Electric Zonal Heating System - ID	Install attic insulation - Self-install	01/30/2016	RTF Deemed	0.5	Sq. ft.
Insulation:Floor InsulationResidential					
Insulation - Floor - Electric FAF Heating System - ID	Install floor insulation-Contractor	01/30/2016	RTF Deemed	1.66	Sq. ft.
Insulation - Floor - Electric Heat Pump Heating System - ID	Install floor insulation-Contractor	01/30/2016	RTF Deemed	0.4	Sq. ft.
Insulation - Floor - Electric Zonal Heating System - ID	Install floor insulation-Contractor	01/30/2016	RTF Deemed	1.63	Sq. ft.
Insulation - Floor - Self Install - Electric FAF Heating System - ID	Install floor insulation-Self Install	01/30/2016	RTF Deemed	1.66	Sq. ft.
Insulation - Floor - Self Install - Electric Heat Pump Heating System - ID	Install floor insulation-Self Install	01/30/2016	RTF Deemed	0.4	Sq. ft.
Insulation - Floor - Self Install - Electric Zonal Heating System - ID	Install floor insulation-Self Install	01/30/2016	RTF Deemed	1.63	Sq. ft.
Insulation:Wall InsulationResidential					
Insulation - Wall - Electric FAF Heating System - ID	Install wall insulation - Contractor	01/30/2016	RTF Deemed	2.96	Sq. ft.
Insulation - Wall - Electric Heat Pump Heating System - ID	Install wall insulation - Contractor	01/30/2016	RTF Deemed	1.79	Sq. ft.
Insulation - Wall - Electric Zonal Heating System - ID	Install wall insulation - Contractor	01/30/2016	RTF Deemed	2.17	Sq. ft.
Windows:New Homes WindowsResidential					
New Homes Windows - U-0.22 - Electric FAF - ID	Install windows of .22 U value or lower in new home	01/30/2016	RTF Deemed	2.37	Sq. ft.
New Homes Windows - U-0.22 - Electric Zonal Heat - ID	Install windows of .22 U value or lower in new home	01/30/2016	RTF Deemed	1.84	Sq. ft.
New Homes Windows - U-0.22 - Heat Pump System - ID	Install windows of .22 U value or lower in new home	01/30/2016	RTF Deemed	1.36	Sq. ft.
Windows:Windows Tier 1Residential					
Window Tier 1 - U-0.30 - Electric FAF Heating System - ID	Install low U-factor window - Tier 1	01/30/2016	RTF Deemed	0.9	Sq. ft.
Window Tier 1 - U-0.30 - Electric Heat Pump Heating System - ID	Install low U-factor window - Tier 1	01/30/2016	RTF Deemed	0.5	Sq. ft.
Window Tier 1 - U-0.30 - Electric Zonal Heating System - ID	Install low U-factor window - Tier 1	01/30/2016	RTF Deemed	0.71	Sq. ft.
Windows:Windows Tier 2Residential					
Window Tier 2 - U-0.22 - Electric FAF Heating System - ID	Install low U-factor window - Tier 2	01/30/2016	RTF Deemed	2.37	Sq. ft.
Window Tier 2 - U-0.22 - Electric Heat Pump Heating System - ID	Install low U-factor window - Tier 2	01/30/2016	RTF Deemed	1.36	Sq. ft.
Window Tier 2 - U-0.22 - Electric Zonal Heating System - ID	Install low U-factor window - Tier 2	01/30/2016	RTF Deemed	1.84	Sq. ft.
Measure Category : Electronics					
Advanced Power Strips:Advanced Power Strips - IR SensingResidential					
Advanced Power Strip - IR Sensing - Direct Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	216	Measure
Advanced Power Strip - IR Sensing - Owner Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	216	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
Advanced Power Strips:Advanced Power Strips - Load Sensing		Residential			
Advanced Power Strip - Load Sensing - Direct Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	40	Measure
Advanced Power Strip - Load Sensing - Owner Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	30	Measure
Advanced Power Strips:Advanced Power Strips - Occupancy		Residential			
Advanced Power Strip - Occupancy Sensing - Direct Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	70	Measure
Advanced Power Strip - Occupancy Sensing - Owner Install - ID	Advanced Power Strip	01/30/2016	RTF Deemed	70	Measure
Measure Category : Energy Kits					
Lighting:CFL Kit		Residential			
Energy Savings Kit - CFL - ID	Energy savings kit - 4-13 W CFLs	04/14/2014	RMP Deemed	63.68	Measure
Lighting:LED Kit		Residential			
Energy Savings Kit - LED - ID	Energy savings kit - 4-9.5 W LEDs	03/30/2017	RMP Deemed	32.76	Measure
Lighting and Plumbing:Basic Kit		Residential			
Energy Savings Kit - Basic - 1 Bathroom - ID	Energy savings kit - 4-13W CFLs, 1.5 GPM kitchen aerator, 0.5 GPM bathroom aerator, 1.5 GPM showerhead	04/14/2014	RMP Deemed	412.04	Measure
Energy Savings Kit - Basic - 2 Bathrooms - ID	Energy savings kit - 4-13W CFLs, 1.5 GPM kitchen aerator, 2-0.5 GPM bathroom aerators, 2-1.5 GPM showerheads	04/14/2014	RMP Deemed	734.63	Measure
Lighting and Plumbing:Best Kit		Residential			
Energy Savings Kit - Best - 1 Bathroom - ID	Energy savings kit - 4-9.5W LEDs, 1.5 GPM kitchen aerator, 0.5 GPM bathroom aerator, 1.5 GPM handheld showerhead	03/30/2017	RMP Deemed	375.24	Measure
Energy Savings Kit - Best - 2 Bathrooms - ID	Energy savings kit - 4-9.5W LEDs, 1.5 GPM kitchen aerator, 2-0.5 GPM bathroom aerators, 2-1.5 GPM handheld showerheads	03/30/2017	RMP Deemed	582.22	Measure
Lighting and Plumbing:Better Kit		Residential			
Energy Savings Kit - Better - 1 Bathroom - ID	Energy savings kit - 4-13W CFLs, 1.5 GPM kitchen aerator, 0.5 GPM bathroom aerator, 1.5 GPM handheld showerhead	04/14/2014	RMP Deemed	412.04	Measure
Energy Savings Kit - Better - 2 Bathrooms - ID	Energy savings kit - 4-13W CFLs, 1.5 GPM kitchen aerator, 2-0.5 GPM bathroom aerators, 2-1.5 GPM handheld showerheads	04/14/2014	RMP Deemed	734.63	Measure
Measure Category : HVAC					
Controls and Thermostats:Thermostat		Residential			
Smart T-stat w/ ASHP - ID	Wi-Fi enabled, programmable climate control device that allows the user to customize a schedule to control the	01/30/2016	RMP Deemed	1,063	null

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
	temperature of their home throughout the day				
Smart T-stat w/ EFAF + CAC - ID	Wi-Fi enabled, programmable climate control device that allows the user to customize a schedule to control the temperature of their home throughout the day	01/30/2016	RMP Deemed	1,448	null
Smart T-stat w/ EFAF - ID	Wi-Fi enabled, programmable climate control device that allows the user to customize a schedule to control the temperature of their home throughout the day	01/30/2016	RMP Deemed	1,330	null
Cooling:Central Air ConditionerResidential					
Central Air Conditioner - ID	Energy efficient central air conditioning	01/30/2016	RMP Deemed	89.25	Measure
Cooling:Evaporative CoolerResidential					
Evaporative Cooler - 2,000 - 3,499 CFM - ID	Evaporative coolers	01/30/2016	RMP Deemed	210	Measure
Evaporative Cooler - Min 3,500 CFM - ID	Evaporative coolers	01/30/2016	RMP Deemed	368	Measure
Evaporative Cooler - Min 3,500 CFM - Self Install - ID	Evaporative coolers	01/30/2016	RMP Deemed	368	Measure
Cooling:Residential Room Air ConditionerResidential					
Room Air Conditioner - ID	Energy efficient room air conditioners	01/30/2016	RMP Deemed	39	Measure
Ducting:Duct Sealing and/or InsulationResidential					
Duct Sealing & Insulation - Electric Heat - ID	Seal and insulate existing duct work	01/30/2016	RTF Deemed	3,802	Measure
Duct Sealing Only - Pre-Insulated Ducts - Electric FAF with CAC - ID	Seal existing duct work - Pre-insulated ducts	08/20/2012	RTF Deemed	2,177	Measure
Duct Sealing Only - Pre-Insulated Ducts - Electric FAF without CAC - ID	Seal existing duct work - Pre-insulated ducts	08/20/2012	RTF Deemed	2,138	Measure
Duct Sealing Only - Pre-Insulated Ducts - Electric Heat - ID	Seal existing duct work	01/30/2016	RTF Deemed	2,474	Measure
Duct Sealing Only - Pre-Insulated Ducts - Electric Heat Pump Heating system - ID	Seal existing duct work - Pre-insulated ducts	08/20/2012	RTF Deemed	2,059	Measure
Manufactured Home - Duct Sealing - Direct Install - Test Only - ID	Test existing duct work	01/30/2016	RMP Deemed	0	null
Manufactured Home - Duct Sealing - Direct Install - Test, Crossover Replacement, Seal and Insulate - ID	Test, Seal and insulate existing duct work. Crossover replacement	01/30/2016	RMP Deemed	3,267	null
Manufactured Home - Duct Sealing - Direct Install - Test, Seal and Insulate - ID	Test, Seal and insulate existing duct work	01/30/2016	RMP Deemed	3,267	null
Heat Pump:Heat Pump - Best Practice InstallationResidential					
New Homes Heat Pump with Best Practices Installation and Sizing - ID	New Homes Heat Pump with Best Practices Installation and Sizing - ID	01/30/2016	RMP Deemed	598	null
Heat Pump:Heat Pump - Air SourceResidential					
Heat Pump Conversion - Tier 1 - Electric FAF with CAC - ID	Convert electric forced air furnace to air source heat pump with Best Practices Installation and Proper Sizing	01/30/2016	RTF Deemed	6,429	Measure
Heat Pump Conversion - Tier 1 - Electric FAF without CAC - ID	Convert electric forced air furnace to air source heat pump	01/30/2016	RTF Deemed	6,077	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
Heat Pump Conversion - Tier 2 - Electric FAF with CAC - ID	Convert electric forced air furnace to air source heat pump	01/30/2016	RTF Deemed	6,493	Measure
Heat Pump Conversion - Tier 2 - Electric FAF without CAC - ID	Convert electric forced air furnace to air source heat pump	01/30/2016	RTF Deemed	6,141	Measure
Heat Pump Upgrade with Best practice install & sizing - ID	Combine heat pump upgrade with best practices sizing and installation	01/30/2016	RMP Deemed	1,078	Measure
Heat Pump:Heat Pump - DuctlessResidential					
Ductless Heat Pump - ID	Install a Ductless Heat Pump	01/30/2016	RTF Deemed	1,516	Measure
New Homes Ductless Heat Pump - ID	New Homes Ductless Heat Pump - ID	01/30/2016	RMP Deemed	3,089	Measure
Heat Pump:Heat Pump - Ground SourceResidential					
GSHP Conversion from FAF without CAC - ID	Convert electric forced air furnace to ground source heat pump	01/30/2016	RTF Deemed	12,525	Measure
GSHP Upgrade from ASHP - ID	Replace air source heat pump with ground source heat pump	01/30/2016	RTF Deemed	4,702	Measure
Heat Pump:Heat Pump - Quality InstallationResidential					
Heat Pump Best Practices Installation and Proper Sizing - ID	Install new heat pump with best practices installation and proper sizing	01/30/2016	RTF Deemed	1,014	Measure
Ventilation:Furnace FanResidential					
95% Gas Furnace with ECM Blower - ID	ECM blower in 95% gas furnace	01/30/2016	RMP Deemed	528	Measure
Measure Category : Lighting					
General Service Fixtures:CFLResidential					
CFL Fixture - ENERGY STAR - ID	ENERGY STAR general service CFL fixture	04/14/2014	RMP Deemed	43.66	Measure
General Service Fixtures:LEDResidential					
LED Fixture - ENERGY STAR - ID	ENERGY STAR general service LED fixture	04/14/2014	RMP Deemed	40.94	Measure
General Service Lamps:CFLResidential					
CFL General Purpose - A-Lamp: 10 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.08	Measure
CFL General Purpose - A-Lamp: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.82	Measure
CFL General Purpose - A-Lamp: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.55	Measure
CFL General Purpose - A-Lamp: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.55	Measure
CFL General Purpose - A-Lamp: 13 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.37	Measure
CFL General Purpose - A-Lamp: 13 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.92	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL General Purpose - A-Lamp: 13 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.92	Measure
CFL General Purpose - A-Lamp: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	20.66	Measure
CFL General Purpose - A-Lamp: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.39	Measure
CFL General Purpose - A-Lamp: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.39	Measure
CFL General Purpose - A-Lamp: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	19.94	Measure
CFL General Purpose - A-Lamp: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.86	Measure
CFL General Purpose - A-Lamp: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.86	Measure
CFL General Purpose - A-Lamp: 19 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.1	Measure
CFL General Purpose - A-Lamp: 19 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.73	Measure
CFL General Purpose - A-Lamp: 19 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.73	Measure
CFL General Purpose - A-Lamp: 20 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.51	Measure
CFL General Purpose - A-Lamp: 20 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.51	Measure
CFL General Purpose - A-Lamp: 20 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.51	Measure
CFL General Purpose - A-Lamp: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.25	Measure
CFL General Purpose - A-Lamp: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.61	Measure
CFL General Purpose - A-Lamp: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.61	Measure
CFL General Purpose - Spiral: 10 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	13.53	Measure
CFL General Purpose - Spiral: 10 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.08	Measure
CFL General Purpose - Spiral: 10 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.08	Measure
CFL General Purpose - Spiral: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.82	Measure
CFL General Purpose - Spiral: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.55	Measure
CFL General Purpose - Spiral: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.55	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL General Purpose - Spiral: 12 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.11	Measure
CFL General Purpose - Spiral: 12 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.02	Measure
CFL General Purpose - Spiral: 12 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	9.02	Measure
CFL General Purpose - Spiral: 13 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.37	Measure
CFL General Purpose - Spiral: 13 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.92	Measure
CFL General Purpose - Spiral: 13 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.92	Measure
CFL General Purpose - Spiral: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	20.66	Measure
CFL General Purpose - Spiral: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.39	Measure
CFL General Purpose - Spiral: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.39	Measure
CFL General Purpose - Spiral: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	27.07	Measure
CFL General Purpose - Spiral: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	20.16	Measure
CFL General Purpose - Spiral: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	20.16	Measure
CFL General Purpose - Spiral: 18 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	24.93	Measure
CFL General Purpose - Spiral: 18 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	18.57	Measure
CFL General Purpose - Spiral: 18 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	18.57	Measure
CFL General Purpose - Spiral: 19 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	24.22	Measure
CFL General Purpose - Spiral: 19 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	18.04	Measure
CFL General Purpose - Spiral: 19 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	18.04	Measure
CFL General Purpose - Spiral: 20 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.51	Measure
CFL General Purpose - Spiral: 20 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.51	Measure
CFL General Purpose - Spiral: 20 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.51	Measure
CFL General Purpose - Spiral: 21 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	36.33	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL General Purpose - Spiral: 21 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	27.06	Measure
CFL General Purpose - Spiral: 21 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	27.06	Measure
CFL General Purpose - Spiral: 22 watts - Direct Install- ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	35.62	Measure
CFL General Purpose - Spiral: 22 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	26.53	Measure
CFL General Purpose - Spiral: 22 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	26.53	Measure
CFL General Purpose - Spiral: 23 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	34.9	Measure
CFL General Purpose - Spiral: 23 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	26	Measure
CFL General Purpose - Spiral: 23 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	26	Measure
CFL General Purpose - Spiral: 24 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	34.19	Measure
CFL General Purpose - Spiral: 24 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	25.47	Measure
CFL General Purpose - Spiral: 24 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	25.47	Measure
CFL General Purpose - Spiral: 25 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	33.48	Measure
CFL General Purpose - Spiral: 25 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	01/30/2016	RMP Deemed	24.94	Measure
CFL General Purpose - Spiral: 25 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	24.94	Measure
CFL General Purpose - Spiral: 26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	32.77	Measure
CFL General Purpose - Spiral: 26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	24.41	Measure
CFL General Purpose - Spiral: 26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	24.41	Measure
CFL General Purpose - Spiral: 27 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	32.05	Measure
CFL General Purpose - Spiral: 27 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.88	Measure
CFL General Purpose - Spiral: 27 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.88	Measure
CFL General Purpose - Spiral: 28 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	31.34	Measure
CFL General Purpose - Spiral: 28 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.35	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL General Purpose - Spiral: 28 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	23.35	Measure
CFL General Purpose - Spiral: 29 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	30.63	Measure
CFL General Purpose - Spiral: 29 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	22.82	Measure
CFL General Purpose - Spiral: 29 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	22.82	Measure
CFL General Purpose - Spiral: 3 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	8.55	Measure
CFL General Purpose - Spiral: 3 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	6.37	Measure
CFL General Purpose - Spiral: 3 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	6.37	Measure
CFL General Purpose - Spiral: 30 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	29.92	Measure
CFL General Purpose - Spiral: 30 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	22.28	Measure
CFL General Purpose - Spiral: 30 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	22.28	Measure
CFL General Purpose - Spiral: 31 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	29.2	Measure
CFL General Purpose - Spiral: 31 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.75	Measure
CFL General Purpose - Spiral: 31 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.75	Measure
CFL General Purpose - Spiral: 32 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	28.49	Measure
CFL General Purpose - Spiral: 32 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.22	Measure
CFL General Purpose - Spiral: 32 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	21.22	Measure
CFL General Purpose - Spiral: 4 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.96	Measure
CFL General Purpose - Spiral: 4 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.14	Measure
CFL General Purpose - Spiral: 4 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.14	Measure
CFL General Purpose - Spiral: 5 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	17.81	Measure
CFL General Purpose - Spiral: 5 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	13.26	Measure
CFL General Purpose - Spiral: 5 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	13.26	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL General Purpose - Spiral: 6 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	16.38	Measure
CFL General Purpose - Spiral: 6 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.2	Measure
CFL General Purpose - Spiral: 6 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	12.2	Measure
CFL General Purpose - Spiral: 7 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	15.67	Measure
CFL General Purpose - Spiral: 7 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.67	Measure
CFL General Purpose - Spiral: 7 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.67	Measure
CFL General Purpose - Spiral: 8 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.96	Measure
CFL General Purpose - Spiral: 8 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.14	Measure
CFL General Purpose - Spiral: 8 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	11.14	Measure
CFL General Purpose - Spiral: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	14.25	Measure
CFL General Purpose - Spiral: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.61	Measure
CFL General Purpose - Spiral: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-General Purpose	04/14/2014	RMP Deemed	10.61	Measure
General Service Lamps:LED Residential					
LED General Purpose: 10 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.51	Measure
LED General Purpose: 10 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.51	Measure
LED General Purpose: 10 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.51	Measure
LED General Purpose: 10.5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.15	Measure
LED General Purpose: 10.5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.15	Measure
LED General Purpose: 10.5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	23.15	Measure
LED General Purpose: 11 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	22.79	Measure
LED General Purpose: 11 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	22.79	Measure
LED General Purpose: 11 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	22.79	Measure
LED General Purpose: 12 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General	01/30/2016	RMP Deemed	22.08	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
	Purpose				
LED General Purpose: 12 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	22.08	Measure
LED General Purpose: 12 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	22.08	Measure
LED General Purpose: 13 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 13 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 13 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 13 watts - Semi-omnidirectional - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 13 watts - Semi-omnidirectional - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 13 watts - Semi-omnidirectional - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	21.37	Measure
LED General Purpose: 14 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	20.66	Measure
LED General Purpose: 14 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	20.66	Measure
LED General Purpose: 14 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	20.66	Measure
LED General Purpose: 15 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	19.94	Measure
LED General Purpose: 15 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	19.94	Measure
LED General Purpose: 15 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	19.94	Measure
LED General Purpose: 16 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	26.36	Measure
LED General Purpose: 16 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	26.36	Measure
LED General Purpose: 16 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	26.36	Measure
LED General Purpose: 17 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	39.18	Measure
LED General Purpose: 17 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	39.18	Measure
LED General Purpose: 17 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	39.18	Measure
LED General Purpose: 18 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	38.46	Measure
LED General Purpose: 18 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General	01/30/2016	RMP Deemed	38.46	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
	Purpose				
LED General Purpose: 18 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	38.46	Measure
LED General Purpose: 19 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	37.75	Measure
LED General Purpose: 19 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	37.75	Measure
LED General Purpose: 19 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	37.75	Measure
LED General Purpose: 2 watts - Semi-omnidirectional - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 2 watts - Semi-omnidirectional - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 2 watts - Semi-omnidirectional - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 23 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	34.9	Measure
LED General Purpose: 23 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	34.9	Measure
LED General Purpose: 23 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	34.9	Measure
LED General Purpose: 5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	27.07	Measure
LED General Purpose: 5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	27.07	Measure
LED General Purpose: 5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	27.07	Measure
LED General Purpose: 6 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 6 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 6 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	16.38	Measure
LED General Purpose: 7 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	15.67	Measure
LED General Purpose: 7 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	15.67	Measure
LED General Purpose: 7 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	15.67	Measure
LED General Purpose: 8 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.96	Measure
LED General Purpose: 8 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.96	Measure
LED General Purpose: 8 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General	01/30/2016	RMP Deemed	14.96	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
	Purpose				
LED General Purpose: 8 watts - Semi-omnidirectional - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.96	Measure
LED General Purpose: 8 watts - Semi-omnidirectional - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.96	Measure
LED General Purpose: 8 watts - Semi-omnidirectional - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.96	Measure
LED General Purpose: 9 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
LED General Purpose: 9 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
LED General Purpose: 9 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
LED General Purpose: 9 watts - Semi-omnidirectional - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
LED General Purpose: 9 watts - Semi-omnidirectional - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
LED General Purpose: 9 watts - Semi-omnidirectional - Retail - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	01/30/2016	RMP Deemed	14.25	Measure
Specialty Lamps:CFL					
Residential					
CFL Specialty - 3-Way: 10,20,28 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	56.98	Measure
CFL Specialty - 3-Way: 10,20,28 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 10,20,28 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 12,19,28 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	57.7	Measure
CFL Specialty - 3-Way: 12,19,28 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.98	Measure
CFL Specialty - 3-Way: 12,19,28 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.98	Measure
CFL Specialty - 3-Way: 12,20,26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	56.98	Measure
CFL Specialty - 3-Way: 12,20,26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 12,20,26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 12,20,29 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	56.98	Measure
CFL Specialty - 3-Way: 12,20,29 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 12,20,29 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 12,21,32 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	56.27	Measure
CFL Specialty - 3-Way: 12,21,32 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	41.92	Measure
CFL Specialty - 3-Way: 12,21,32 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	41.92	Measure
CFL Specialty - 3-Way: 12,22,33 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	55.56	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - 3-Way: 12,22,33 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	41.39	Measure
CFL Specialty - 3-Way: 12,22,33 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	41.39	Measure
CFL Specialty - 3-Way: 12,23,29 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	54.85	Measure
CFL Specialty - 3-Way: 12,23,29 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	40.86	Measure
CFL Specialty - 3-Way: 12,23,29 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	40.86	Measure
CFL Specialty - 3-Way: 13,20,25 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	56.98	Measure
CFL Specialty - 3-Way: 13,20,25 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 13,20,25 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.45	Measure
CFL Specialty - 3-Way: 14,19,32 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	57.7	Measure
CFL Specialty - 3-Way: 14,19,32 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	42.98	Measure
CFL Specialty - 3-Way: 14,19,32 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	42.98	Measure
CFL Specialty - 3-Way: 15,26,40 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	52.71	Measure
CFL Specialty - 3-Way: 15,26,40 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	39.26	Measure
CFL Specialty - 3-Way: 15,26,40 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	39.26	Measure
CFL Specialty - 3-Way: 16,25,32 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	53.42	Measure
CFL Specialty - 3-Way: 16,25,32 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	39.79	Measure
CFL Specialty - 3-Way: 16,25,32 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	39.79	Measure
CFL Specialty - Candelabra: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	21.37	Measure
CFL Specialty - Candelabra: 13 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	21.37	Measure
CFL Specialty - Candelabra: 13 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.92	Measure
CFL Specialty - Candelabra: 13 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.92	Measure
CFL Specialty - Candelabra: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Candelabra: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Candelabra: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Candelabra: 3 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	26.36	Measure
CFL Specialty - Candelabra: 3 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.63	Measure
CFL Specialty - Candelabra: 3 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	19.63	Measure
CFL Specialty - Candelabra: 5 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.25	Measure
CFL Specialty - Candelabra: 5 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	10.61	Measure
CFL Specialty - Candelabra: 5 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	10.61	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - Candelabra: 7 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	23.51	Measure
CFL Specialty - Candelabra: 7 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	17.51	Measure
CFL Specialty - Candelabra: 7 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	17.51	Measure
CFL Specialty - Candelabra: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	22.08	Measure
CFL Specialty - Candelabra: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	16.45	Measure
CFL Specialty - Candelabra: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	16.45	Measure
CFL Specialty - Daylight: 10 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	21.37	Measure
CFL Specialty - Daylight: 10 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.92	Measure
CFL Specialty - Daylight: 10 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.92	Measure
CFL Specialty - Daylight: 13 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	21.37	Measure
CFL Specialty - Daylight: 13 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.92	Measure
CFL Specialty - Daylight: 13 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.92	Measure
CFL Specialty - Daylight: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Daylight: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Daylight: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Daylight: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.94	Measure
CFL Specialty - Daylight: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.86	Measure
CFL Specialty - Daylight: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	14.86	Measure
CFL Specialty - Daylight: 18 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	24.93	Measure
CFL Specialty - Daylight: 18 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	18.57	Measure
CFL Specialty - Daylight: 18 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	18.57	Measure
CFL Specialty - Daylight: 19 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	24.22	Measure
CFL Specialty - Daylight: 19 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	18.04	Measure
CFL Specialty - Daylight: 19 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	18.04	Measure
CFL Specialty - Daylight: 20 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	23.51	Measure
CFL Specialty - Daylight: 20 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	17.51	Measure
CFL Specialty - Daylight: 20 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	17.51	Measure
CFL Specialty - Daylight: 22 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	35.62	Measure
CFL Specialty - Daylight: 22 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	26.53	Measure
CFL Specialty - Daylight: 22 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	26.53	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - Daylight: 23 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	34.9	Measure
CFL Specialty - Daylight: 23 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	26	Measure
CFL Specialty - Daylight: 23 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	26	Measure
CFL Specialty - Daylight: 24 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	34.19	Measure
CFL Specialty - Daylight: 24 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	25.47	Measure
CFL Specialty - Daylight: 24 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	25.47	Measure
CFL Specialty - Daylight: 25 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	33.48	Measure
CFL Specialty - Daylight: 25 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	24.94	Measure
CFL Specialty - Daylight: 25 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/30/2016	RMP Deemed	24.94	Measure
CFL Specialty - Daylight: 26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.77	Measure
CFL Specialty - Daylight: 26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	24.41	Measure
CFL Specialty - Daylight: 26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	24.41	Measure
CFL Specialty - Daylight: 27 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.05	Measure
CFL Specialty - Daylight: 27 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	23.88	Measure
CFL Specialty - Daylight: 27 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	23.88	Measure
CFL Specialty - Daylight: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	22.08	Measure
CFL Specialty - Daylight: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	16.45	Measure
CFL Specialty - Daylight: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	16.45	Measure
CFL Specialty - Dimmable: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Dimmable: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Dimmable: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Dimmable: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.77	Measure
CFL Specialty - Dimmable: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	24.41	Measure
CFL Specialty - Dimmable: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	24.41	Measure
CFL Specialty - Dimmable: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.05	Measure
CFL Specialty - Dimmable: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	23.88	Measure
CFL Specialty - Dimmable: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	23.88	Measure
CFL Specialty - Dimmable: 16 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	17.1	Measure
CFL Specialty - Dimmable: 16 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	12.73	Measure
CFL Specialty - Dimmable: 16 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	12.73	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - Dimmable: 20 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	28.49	Measure
CFL Specialty - Dimmable: 20 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	21.22	Measure
CFL Specialty - Dimmable: 20 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	21.22	Measure
CFL Specialty - Dimmable: 23 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	54.85	Measure
CFL Specialty - Dimmable: 23 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	40.86	Measure
CFL Specialty - Dimmable: 23 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	40.86	Measure
CFL Specialty - Dimmable: 24 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	54.13	Measure
CFL Specialty - Dimmable: 24 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	40.33	Measure
CFL Specialty - Dimmable: 24 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	40.33	Measure
CFL Specialty - Dimmable: 25 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	12/31/2013	RMP Deemed	39.79	Measure
CFL Specialty - Dimmable: 26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	52.71	Measure
CFL Specialty - Dimmable: 26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	39.26	Measure
CFL Specialty - Dimmable: 26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	39.26	Measure
CFL Specialty - Dimmable: 27 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	52	Measure
CFL Specialty - Dimmable: 27 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	38.73	Measure
CFL Specialty - Dimmable: 27 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	38.73	Measure
CFL Specialty - Globe: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Globe: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Globe: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Globe: 12 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.94	Measure
CFL Specialty - Globe: 12 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.86	Measure
CFL Specialty - Globe: 12 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	14.86	Measure
CFL Specialty - Globe: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Globe: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Globe: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Globe: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.94	Measure
CFL Specialty - Globe: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.86	Measure
CFL Specialty - Globe: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	14.86	Measure
CFL Specialty - Globe: 25 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.94	Measure
CFL Specialty - Globe: 25 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.86	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - Globe: 25 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	14.86	Measure
CFL Specialty - Globe: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	22.08	Measure
CFL Specialty - Globe: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	16.45	Measure
CFL Specialty - Globe: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	16.45	Measure
CFL Specialty - Outdoor: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	20.66	Measure
CFL Specialty - Outdoor: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	15.39	Measure
CFL Specialty - Outdoor: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	15.39	Measure
CFL Specialty - Outdoor: 13 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	19.23	Measure
CFL Specialty - Outdoor: 13 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.33	Measure
CFL Specialty - Outdoor: 13 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	14.33	Measure
CFL Specialty - Outdoor: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.77	Measure
CFL Specialty - Outdoor: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	24.41	Measure
CFL Specialty - Outdoor: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	24.41	Measure
CFL Specialty - Outdoor: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	32.05	Measure
CFL Specialty - Outdoor: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	23.88	Measure
CFL Specialty - Outdoor: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	23.88	Measure
CFL Specialty - Outdoor: 23 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	12.11	Measure
CFL Specialty - Outdoor: 23 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	9.02	Measure
CFL Specialty - Outdoor: 23 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	9.02	Measure
CFL Specialty - Outdoor: 26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	34.9	Measure
CFL Specialty - Outdoor: 26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	26	Measure
CFL Specialty - Outdoor: 26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	26	Measure
CFL Specialty - Outdoor: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	22.08	Measure
CFL Specialty - Outdoor: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	16.45	Measure
CFL Specialty - Outdoor: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	16.45	Measure
CFL Specialty - Reflector: 11 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	13.53	Measure
CFL Specialty - Reflector: 11 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	10.08	Measure
CFL Specialty - Reflector: 11 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	10.08	Measure
CFL Specialty - Reflector: 14 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	36.33	Measure
CFL Specialty - Reflector: 14 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	27.06	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
CFL Specialty - Reflector: 14 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	27.06	Measure
CFL Specialty - Reflector: 15 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	35.62	Measure
CFL Specialty - Reflector: 15 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	26.53	Measure
CFL Specialty - Reflector: 15 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	26.53	Measure
CFL Specialty - Reflector: 16 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	34.9	Measure
CFL Specialty - Reflector: 16 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	26	Measure
CFL Specialty - Reflector: 16 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	26	Measure
CFL Specialty - Reflector: 18 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	40.6	Measure
CFL Specialty - Reflector: 18 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	30.24	Measure
CFL Specialty - Reflector: 18 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	30.24	Measure
CFL Specialty - Reflector: 19 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	39.89	Measure
CFL Specialty - Reflector: 19 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	29.71	Measure
CFL Specialty - Reflector: 19 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	29.71	Measure
CFL Specialty - Reflector: 20 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	39.18	Measure
CFL Specialty - Reflector: 20 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	29.18	Measure
CFL Specialty - Reflector: 20 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	29.18	Measure
CFL Specialty - Reflector: 23 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	47.72	Measure
CFL Specialty - Reflector: 23 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	35.55	Measure
CFL Specialty - Reflector: 23 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	35.55	Measure
CFL Specialty - Reflector: 26 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	45.59	Measure
CFL Specialty - Reflector: 26 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	33.96	Measure
CFL Specialty - Reflector: 26 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	33.96	Measure
CFL Specialty - Reflector: 9 watts - Direct Install - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	14.96	Measure
CFL Specialty - Reflector: 9 watts - Mail By Request - ID	Energy efficient Compact Fluorescent Lamps-Specialty	04/14/2014	RMP Deemed	11.14	Measure
CFL Specialty - Reflector: 9 watts - Retail - ID	Energy efficient Compact Fluorescent Lamps-Specialty	01/01/2014	RMP Deemed	11.14	Measure
Specialty Lamps:LED Residential					
LED Downlight: 10 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 10 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 10 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 11 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	45.59	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
LED Downlight: 11 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	45.59	Measure
LED Downlight: 11 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	45.59	Measure
LED Downlight: 12 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.75	Measure
LED Downlight: 12 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.75	Measure
LED Downlight: 12 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.75	Measure
LED Downlight: 13 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.04	Measure
LED Downlight: 13 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.04	Measure
LED Downlight: 13 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	37.04	Measure
LED Downlight: 14 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	36.33	Measure
LED Downlight: 14 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	36.33	Measure
LED Downlight: 14 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	36.33	Measure
LED Downlight: 15 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	35.62	Measure
LED Downlight: 15 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	35.62	Measure
LED Downlight: 15 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	35.62	Measure
LED Downlight: 16 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	42.03	Measure
LED Downlight: 16 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	42.03	Measure
LED Downlight: 16 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	42.03	Measure
LED Downlight: 17 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	41.31	Measure
LED Downlight: 17 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	41.31	Measure
LED Downlight: 17 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	41.31	Measure
LED Downlight: 18 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	40.6	Measure
LED Downlight: 18 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	40.6	Measure
LED Downlight: 18 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	40.6	Measure
LED Downlight: 19 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Downlight: 19 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Downlight: 19 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Downlight: 20 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 20 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 20 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.18	Measure
LED Downlight: 23 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	47.72	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
LED Downlight: 23 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	47.72	Measure
LED Downlight: 23 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	47.72	Measure
LED Downlight: 5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.86	Measure
LED Downlight: 5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.86	Measure
LED Downlight: 5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.86	Measure
LED Downlight: 6 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.15	Measure
LED Downlight: 6 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.15	Measure
LED Downlight: 6 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	49.15	Measure
LED Downlight: 7 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	16.38	Measure
LED Downlight: 7 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	16.38	Measure
LED Downlight: 7 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	16.38	Measure
LED Downlight: 8 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	26.36	Measure
LED Downlight: 8 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	26.36	Measure
LED Downlight: 8 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	26.36	Measure
LED Downlight: 9 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Downlight: 9 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Downlight: 9 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Downlight	01/30/2016	RMP Deemed	39.89	Measure
LED Specialty - 3-Way: 20 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	56.98	Measure
LED Specialty - 3-Way: 20 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	56.98	Measure
LED Specialty - 3-Way: 20 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	56.98	Measure
LED Specialty - 3-Way: 3,8,18 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	Cadmus Eval / UMP /	37.04	Measure
LED Specialty - 3-Way: 5,9,20 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	Cadmus Eval / UMP /	36.33	Measure
LED Specialty - Candelabra: 2 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Candelabra: 2 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Candelabra: 2 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Candelabra: 4 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Candelabra: 4 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Candelabra: 4 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Candelabra: 5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Candelabra: 5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
LED Specialty - Candelabra: 5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Candelabra: 7 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	23.51	Measure
LED Specialty - Candelabra: 7 watts - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	23.51	Measure
LED Specialty - Candelabra: 7 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	23.51	Measure
LED Specialty - Globe: 10 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	21.37	Measure
LED Specialty - Globe: 10 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	21.37	Measure
LED Specialty - Globe: 10 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	21.37	Measure
LED Specialty - Globe: 2 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Globe: 2 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Globe: 2 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	16.38	Measure
LED Specialty - Globe: 4 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Globe: 4 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Globe: 4 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	14.96	Measure
LED Specialty - Globe: 5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Globe: 5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Globe: 5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Globe: 6 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.22	Measure
LED Specialty - Globe: 6 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.22	Measure
LED Specialty - Globe: 6 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.22	Measure
LED Specialty - Globe: 8 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	22.79	Measure
LED Specialty - Globe: 8 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	22.79	Measure
LED Specialty - Globe: 8 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	22.79	Measure
LED Specialty - Reflector: 10 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Reflector: 10 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Reflector: 10 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	24.93	Measure
LED Specialty - Reflector: 4 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	18.52	Measure
LED Specialty - Reflector: 4 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	18.52	Measure
LED Specialty - Reflector: 4 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	18.52	Measure
LED Specialty - Reflector: 5 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.81	Measure
LED Specialty - Reflector: 5 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.81	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
LED Specialty - Reflector: 5 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.81	Measure
LED Specialty - Reflector: 6 watts - Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.1	Measure
LED Specialty - Reflector: 6 watts - Mail By Request - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.1	Measure
LED Specialty - Reflector: 6 watts - Retail - ID	Energy efficient Light Emitting Diode Lamps-Specialty	01/30/2016	RMP Deemed	17.1	Measure

Measure Category : Plumbing

Low Flow Aerators:Aerator - 0.5 gpm		Residential			
Low Flow Aerator - Direct Install - Electric Only - 0.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	74.12	Measure
Low Flow Aerator - Mail By Request - Any Water Heat Fuel - 0.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	30.67	Measure
Low Flow Aerator - Mail By Request - Electric Only - 0.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	62.59	Measure
Low Flow Aerator - Retail - Any Water Heat Fuel - 0.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	28.25	Measure

Low Flow Aerators:Aerator - 1.5 gpm		Residential			
Low Flow Aerator - Direct Install - Electric Only - 1.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	30.52	Measure
Low Flow Aerator - Mail By Request - Any Water Heat Fuel - 1.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	12.63	Measure
Low Flow Aerator - Mail By Request - Electric Only - 1.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	25.77	Measure
Low Flow Aerator - Retail - Any Water Heat Fuel - 1.5 gpm - ID	Install Low Flow Aerator	04/14/2014	RMP Deemed	11.63	Measure

Low Flow Showerheads:Showerhead - 1.50 gpm		Residential			
Low Flow Showerhead - Direct Install - Electric Only - 1.50 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	307	Measure
Low Flow Showerhead - Mail By Request - Any Water Heat Fuel - 1.50 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	170	Measure
Low Flow Showerhead - Mail By Request - Electric Only - 1.50 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	260	Measure
Low Flow Showerhead - Retail - Any Water Heat Fuel - 1.50 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	157	Measure

Low Flow Showerheads:Showerhead - 1.75 gpm		Residential			
Low Flow Showerhead - Direct Install - Electric Only - 1.75 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	222	Measure
Low Flow Showerhead - Mail By Request - Any Water Heat Fuel - 1.75 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	123	Measure
Low Flow Showerhead - Mail By Request - Electric Only - 1.75 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	187	Measure
Low Flow Showerhead - Retail - Any Water Heat Fuel - 1.75 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	121	Measure

Low Flow Showerheads:Showerhead - 2.00 gpm		Residential			
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Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
Low Flow Showerhead - Direct Install - Electric Only - 2.00 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	139	Measure
Low Flow Showerhead - Mail By Request - Any Water Heat Fuel - 2.00 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	77	Measure
Low Flow Showerhead - Mail By Request - Electric Only - 2.00 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	117	Measure
Low Flow Showerhead - Retail - Any Water Heat Fuel - 2.00 gpm - ID	Install a Low Flow Showerhead	04/14/2014	RTF Deemed	81	Measure

Measure Category : Water Heating

Water Heater:Heat Pump Water Heater		Residential			
HPWH Tier 2 or Above Basement 0-55gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,750	Measure
HPWH Tier 2 or Above Basement 0-55gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,750	Measure
HPWH Tier 2 or Above Ducted Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,300	Measure
HPWH Tier 2 or Above Ducted Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,300	Measure
HPWH Tier 2 or Above Ducted Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,785	Measure
HPWH Tier 2 or Above Ducted Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,785	Measure
HPWH Tier 2 or Above Ducted Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,510	Measure
HPWH Tier 2 or Above Ducted Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,510	Measure
HPWH Tier 2 or Above Garage 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,570	Measure
HPWH Tier 2 or Above Garage 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,570	Measure
HPWH Tier 2 or Above Indoor Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,467	Measure
HPWH Tier 2 or Above Indoor Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,467	Measure
HPWH Tier 2 or Above Indoor Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,875	Measure
HPWH Tier 2 or Above Indoor Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,875	Measure
HPWH Tier 2 or Above Indoor Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,601	Measure
HPWH Tier 2 or Above Indoor Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	03/30/2017	RTF Deemed	1,601	Measure
New Homes HPWH Tier 1 Basement 0-55gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
New Homes HPWH Tier 1 Basement 0-55gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
New Homes HPWH Tier 1 Garage 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
New Homes HPWH Tier 1 Garage 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure
New Homes HPWH Tier 1 Indoor Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure
New Homes HPWH Tier 1 Indoor Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure
New Homes HPWH Tier 1 Indoor Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
New Homes HPWH Tier 1 Indoor Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
New Homes HPWH Tier 2 Basement 0-55gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,750	Measure
New Homes HPWH Tier 2 Basement 0-55gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,750	Measure
New Homes HPWH Tier 2 Ducted Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,300	Measure
New Homes HPWH Tier 2 Ducted Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,300	Measure
New Homes HPWH Tier 2 Ducted Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,785	Measure
New Homes HPWH Tier 2 Ducted Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,785	Measure
New Homes HPWH Tier 2 Ducted Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,510	Measure
New Homes HPWH Tier 2 Ducted Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,510	Measure
New Homes HPWH Tier 2 Garage 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,570	Measure
New Homes HPWH Tier 2 Garage 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,570	Measure
New Homes HPWH Tier 2 Indoor Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,467	Measure
New Homes HPWH Tier 2 Indoor Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,467	Measure
New Homes HPWH Tier 2 Indoor Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,875	Measure
New Homes HPWH Tier 2 Indoor Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,875	Measure
New Homes HPWH Tier 2 Indoor Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,601	Measure
New Homes HPWH Tier 2 Indoor Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,601	Measure
New Homes HPWH Tier 3 Basement 0-55gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,857	Measure
New Homes HPWH Tier 3 Basement 0-55gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,857	Measure
New Homes HPWH Tier 3 Ducted Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,361	Measure
New Homes HPWH Tier 3 Ducted Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,361	Measure
New Homes HPWH Tier 3 Ducted Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,887	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
New Homes HPWH Tier 3 Ducted Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,887	Measure
New Homes HPWH Tier 3 Ducted Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,585	Measure
New Homes HPWH Tier 3 Ducted Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,585	Measure
New Homes HPWH Tier 3 Garage 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,659	Measure
New Homes HPWH Tier 3 Garage 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,659	Measure
New Homes HPWH Tier 3 Indoor Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,545	Measure
New Homes HPWH Tier 3 Indoor Electric Resistance Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,545	Measure
New Homes HPWH Tier 3 Indoor Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,982	Measure
New Homes HPWH Tier 3 Indoor Gas Heat 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,982	Measure
New Homes HPWH Tier 3 Indoor Heat Pump 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,686	Measure
New Homes HPWH Tier 3 Indoor Heat Pump 0-55 Gallons Self Install - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,686	Measure
New Homes HPWH Tier1 Indoor Electric Resistance Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure
New Homes HPWH Tier1 Indoor Gas Heat 0-55 Gallons - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure

Measure Category : Whole Home

Whole Home:New Home - Performance Path		Residential			
New Homes Whole Home Performance Path Tier 1 - ID	A flexible compliance method for contractors to build to energy efficient new homes.	01/30/2016	RMP Deemed	1,727	Measure
New Homes Whole Home Performance Path Tier 2 - ID	A flexible compliance method for contractors to build to energy efficient new homes.	01/30/2016	RMP Deemed	3,454	Measure
New Homes Whole Home Performance Path Tier 3 - ID	A flexible compliance method for contractors to build to energy efficient new homes.	01/30/2016	RMP Deemed	5,181	Measure

Whole Home:New Homes - Eco-rated Manufactured		Residential			
New Manufactured Home Eco-rated Homes - Electric FAF - ID		01/30/2016	RTF Deemed	8,897	null
New Manufactured Home Eco-rated Homes - Gas Furnace - ID		01/30/2016	RTF Deemed	1,043	null
New Manufactured Home Eco-rated Homes - Heat Pump - ID		01/30/2016	RTF Deemed	6,372	null

Whole Home:New Homes - Energy Star Manufactured		Residential			
New Manufactured Home - Energy Star - Electric FAF - ID	New Manufactured Home - Energy Star - Electric FAF - ID	01/30/2016	RTF Deemed	8,057	null
New Manufactured Home - Energy Star - Electric Heat Pump - ID	New Manufactured Home - Energy Star - Electric Heat Pump - ID	01/30/2016	RTF Deemed	5,516	null
New Manufactured Home - Energy Star - Gas Furnace - ID	New Manufactured Home - Energy Star - Gas Furnace -	01/30/2016	RTF Deemed	1,043	null

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Home Energy Savings					
	ID				
Whole Home:New Homes - High Performance Manufactured		Residential			
New High Performance Manufactured Homes - ID	New High Performance Manufactured Homes - ID	01/30/2016	RTF Deemed	11,411	null
Whole Home:Whole Home - Heat Pump		Residential			
Whole Home Upgrade Package - Heat Pump Conversion - ID	Combine attic insulation, heat pump conversion with best practices install and sizing, and duct insulation & sealing	01/30/2016	RMP Deemed	0	Measure
Whole Home Upgrade Package - Heat Pump Upgrade - ID	Combine attic insulation, heat pump upgrade with best practices install and sizing, and duct insulation & sealing	01/30/2016	RMP Deemed	0	Measure

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Low Income Weatherization					
Measure Category : Appliances					
Refrigerators:RefrigeratorResidential Low Income					
901 Refrigerator Replacement - ID	Energy Star refrigerators	03/01/2016	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Measure Category : Building Shell					
Air Sealing:Air Sealed/InfiltrationResidential Low Income					
18 Air Sealed/Infiltration - ID	Air sealing	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Doors:Thermal DoorsResidential Low Income					
31 Thermal Doors - ID	Thermal doors	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Grounds:Ground CoverResidential Low Income					
46 Ground Cover - ID	Ground cover when installed with floor insulation	01/01/2014	RMP Deemed	0	Home
Insulation:Ceiling InsulationResidential Low Income					
09 Ceiling Insulation - ID	Ceiling insulation	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Insulation:Floor InsulationResidential Low Income					
11 Floor Insulation - ID	Floor insulation	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Insulation:Wall InsulationResidential Low Income					
08 Wall Insulation - ID	Wall insulation	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Ventilation:Attic VentilationResidential Low Income					
10 Attic Ventilation - ID	Attic ventilation	01/01/2014	RMP Deemed	0	Home
Weatherization:Home WeatherizationResidential					
ID Weatherization - ID	This is not a distinct measure but allows for a deemed savings amount to be applied to shell measures/a set kWh per home	01/01/2018	RMP Deemed	1,185	Home
Weatherization:Home WeatherizationResidential Low Income					
Home Repair Cost - ID	Repairs necessary to install energy efficient measures	01/01/2014	RMP Deemed	0	Home
Windows:Window ReplacementResidential Low Income					
32 Double Glass Replacement - ID	Replacement windows with a U-value of 0.35 or less	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Measure Category : Health and Safety					

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Low Income Weatherization					
Health and Safety:Health and Safety		Residential Low Income			
274 Health and Safety - ID	Health and safety measures related to electric usage	01/01/2014	RMP Deemed	0	Home
Measure Category : HVAC					
Controls and Thermostats:Thermostat		Residential Low Income			
14 Clock Thermostat - ID	Timed thermostats	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Ducting:Duct Sealing and/or Insulation		Residential Low Income			
15 Duct Insulation/Sealing Insulation - ID	Duct insulation	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
581 Duct Sealing - ID	Duct sealing	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Heating:Furnace Repair		Residential Low Income			
271 Furnace Repair - ID	Electric furnace repair	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Heating:Furnace Replacement		Residential Low Income			
272 Furnace Replacement - ID	Electric furnace replacement	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Measure Category : Lighting					
General Service Lamps:CFL		Residential Low Income			
21 CFL Bulbs - ID	Energy Star CFLs	03/01/2016	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
General Service Lamps:LED		Residential Low Income			
50 LED Bulbs - ID	Energy Star LEDs	03/01/2016	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
51 LED Light Fixture - ID	LED Light Fixtures	03/01/2016	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Measure Category : Water Heating					
Flow Control:Faucet Aerators		Residential Low Income			
501 Faucet Aerators - ID	Faucet aerators	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Flow Control:Low Flow Shower Head		Residential Low Income			
19 Low Flow Shower Head - ID	Showerheads	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Pipe Insulation:Pipe Insulation		Residential Low Income			

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : Low Income Weatherization					
12 Pipe Insulation HYD - ID	Water pipe wrap	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Home
Water Heater:Water Heater Repair		Residential	Low Income		
240 Water Heater Repair - ID	Electric water heater repair	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Water Heater:Water Heater Replacement		Residential	Low Income		
273 Water Heater Replacement - ID	Electric water heater replacement	01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure
Measure Category : Whole Home					
Whole Home:Whole Home		Residential	Low Income		
Energy Conservation Education Kit - ID		01/01/2014	RMP Deemed	Savings included in "ID Weatherization - ID" measure	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : See Ya Later, Refrigerator					
Measure Category : Appliances					
Freezers:Freezer Recycling					
Residential					
Freezer Recycling - ID	Freezer recycling	07/01/2014	RMP Deemed	1,033	Measure
Freezer Recycling - Secondary Market Intervention - ID	Freezer recycling, retailer pickup	07/01/2014	RMP Deemed	1,033	Measure
Refrigerators:Refrigerator Recycling					
Residential					
Refrigerator Recycling - ID	Refrigerator recycling	07/01/2014	RMP Deemed	1,022	Measure
Refrigerator Recycling - Secondary Market Intervention - ID	Refrigerator recycling, retailer pickup	07/01/2014	RMP Deemed	1,022	Measure
Measure Category : Food Service Equipment					
Freezers:Residential Freezer Recycling					
Non-Residential					
Freezer Recycling (residential used in a business) - ID	Freezer recycling, residential unit at non-residential site	07/01/2014	RMP Deemed	1,033	Measure
Refrigerators:Residential Refrigerator Recycling					
Non-Residential					
Refrigerator Recycling (residential used in a business) - ID	Refrigerator recycling, residential unit at non-residential site	07/01/2014	RMP Deemed	1,022	Measure
Measure Category : Lighting					
General Service Lamps:CFL Kit					
Non-Residential					
Energy Savings Kit (residential used in a business) - ID	Energy savings kit	07/01/2014	RMP Deemed	30.23	Measure
Energy Savings Kit - ID	Energy savings kit	01/01/2014	RMP Deemed	30.23	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Measure Category : Additional Measures					
Custom:Dust CollectionNon-Residential					
Dust Collection (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Dust Collection (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Other ControlsNon-Residential					
Other Controls (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Other Controls (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Measure Category : Appliances					
Clothes Washers:Commercial Clothes WasherNon-Residential					
High-Efficiency Clothes Washer (Must have Electric Water Heating) - Commercial - ENERGY STAR Qualified - ID	Energy Star Qualified High Efficiency Clothes Washer	01/20/2018	RTF Deemed	581	Measure
Clothes Washers:Residential Clothes Washer - Electric DHW & Non-Residential					
Clothes Washer - 3.2 MEF or Higher - Electric DHW & Electric Dryer (residential used in a business) - ID	Energy efficient clothes washers	05/14/2016	RTF Deemed	143	Measure
Clothes Washers:Residential Clothes Washer - Electric DHW & Non-Residential					
Clothes Washer - 3.2 MEF or Higher - Electric DHW & Gas Dryer (residential used in a business) - ID	Energy efficient clothes washers	05/14/2016	RTF Deemed	54	Measure
Clothes Washers:Residential Clothes Washer - Gas DHW & Non-Residential					
Clothes Washer - 3.2 MEF or Higher - Gas DHW & Electric Dryer (residential used in a business) - ID	Energy efficient clothes washers	05/14/2016	RTF Deemed	106	Measure
Clothes Washers:Residential Clothes Washer - Gas DHW & Gas Non-Residential					
Clothes Washer - 3.2 MEF or Higher - Gas DHW & Gas Dryer (residential used in a business) - ID	Energy efficient clothes washers	05/14/2016	RTF Deemed	16	Measure
Water Heater:Heat Pump Water HeaterNon-Residential					
HPWH Tier 1 Basement 0-55gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
HPWH Tier 1 Basement 0-55gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,214	Measure
HPWH Tier 1 Garage 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure
HPWH Tier 1 Garage 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	689	Measure
HPWH Tier 1 Indoor Electric Resistance Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
HPWH Tier 1 Indoor Electric Resistance Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,124	Measure
HPWH Tier 1 Indoor Gas Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure
HPWH Tier 1 Indoor Gas Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,418	Measure
HPWH Tier 1 Indoor Heat Pump 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
HPWH Tier 1 Indoor Heat Pump 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,217	Measure
HPWH Tier 2 Basement 0-55gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,750	Measure
HPWH Tier 2 Basement 0-55gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,750	Measure
HPWH Tier 2 Ducted Electric Resistance Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,300	Measure
HPWH Tier 2 Ducted Electric Resistance Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,300	Measure
HPWH Tier 2 Ducted Gas Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,785	Measure
HPWH Tier 2 Ducted Gas Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,785	Measure
HPWH Tier 2 Ducted Heat Pump 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,510	Measure
HPWH Tier 2 Ducted Heat Pump 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,510	Measure
HPWH Tier 2 Garage 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,570	Measure
HPWH Tier 2 Garage 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,570	Measure
HPWH Tier 2 Indoor Electric Resistance Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,467	Measure
HPWH Tier 2 Indoor Electric Resistance Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,467	Measure
HPWH Tier 2 Indoor Gas Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,875	Measure
HPWH Tier 2 Indoor Gas Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,875	Measure
HPWH Tier 2 Indoor Heat Pump 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,601	Measure
HPWH Tier 2 Indoor Heat Pump 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,601	Measure
HPWH Tier 3 Basement 0-55gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,857	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
HPWH Tier 3 Basement 0-55gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,857	Measure
HPWH Tier 3 Ducted Electric Resistance Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,361	Measure
HPWH Tier 3 Ducted Electric Resistance Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,361	Measure
HPWH Tier 3 Ducted Gas Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,887	Measure
HPWH Tier 3 Ducted Gas Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,887	Measure
HPWH Tier 3 Ducted Heat Pump 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,585	Measure
HPWH Tier 3 Ducted Heat Pump 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,585	Measure
HPWH Tier 3 Garage 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,659	Measure
HPWH Tier 3 Garage 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,659	Measure
HPWH Tier 3 Indoor Electric Resistance Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,545	Measure
HPWH Tier 3 Indoor Electric Resistance Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,545	Measure
HPWH Tier 3 Indoor Gas Heat 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,982	Measure
HPWH Tier 3 Indoor Gas Heat 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,982	Measure
HPWH Tier 3 Indoor Heat Pump 0-55 Gallons (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,686	Measure
HPWH Tier 3 Indoor Heat Pump 0-55 Gallons Self Install (residential used in a business) - ID	Electric heat pump water heater	01/30/2016	RTF Deemed	1,686	Measure

Measure Category : Building Shell

Custom:Cool Roof		Non-Residential			
Cool Roof (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Cool Roof (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Exterior Shading		Non-Residential			
Exterior Shading (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Exterior Shading (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific

Custom:Glazing		Non-Residential			
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Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Glazing (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Glazing (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Insulation Package Non-Residential					
Insulation Package (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Insulation Package (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Other Building Shell Non-Residential					
Other Building Shell (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Other Building Shell (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Roof/Attic Insulation Non-Residential					
Roof/Attic Insulation (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Roof/Attic Insulation (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Wall Insulation Non-Residential					
Wall Insulation (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Wall Insulation (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Insulation:Roof/Attic Insulation Non-Residential					
Roof/Attic Insulation - New Construction - ID	New Construction Roof/Attic Insulation	05/14/2016	RMP Deemed	0.035	Sq. ft.
Roof/Attic Insulation - Retrofit - ID	Retrofit Roof/Attic Insulation	05/14/2016	RMP Deemed	0.08	Sq. ft.
Insulation:Wall Insulation Non-Residential					
Wall Insulation - New Construction - ID	New construction Wall Insulation	05/14/2016	RMP Deemed	0.011	Sq. ft.
Wall Insulation - Retrofit - ID	Retrofit Wall Insulation	05/14/2016	RMP Deemed	0.064	Sq. ft.
Roof:Cool Roof Non-Residential					
Cool Roof - New Construction - ID	New Construction, Cool Roof, reflective roofing	01/20/2018	RMP Deemed	0.11	Sq. ft.
Cool Roof - Retrofit - ID	Retrofit,Cool Roof, reflective roofing	01/20/2018	RMP Deemed	0.22	Sq. ft.
Windows:Window Film Non-Residential					
Window Film: Existing Windows - ID	Window Film	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Windows:Window Replacement Non-Residential					

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Windows - Retrofit: Assembly - ID	Retrofit preassembled windows	05/14/2016	RMP Deemed	4.425	Sq. ft.
Windows - Retrofit: Site-Built - ID	Retrofit Site built windows	05/14/2016	RMP Deemed	4.065	Sq. ft.
Windows:Window UpgradeNon-Residential					
Windows - New Construction: Assembly - ID	New construction preassembled windows	05/14/2016	RMP Deemed	1.614	Sq. ft.
Windows - New Construction: Site-Built - ID	New construction site built windows	05/14/2016	RMP Deemed	1.219	Sq. ft.
Measure Category : Compressed Air					
Compressed Air:Outside air intakeNon-Residential					
Outside air intake (New Construction) - ID	Permanent ductwork between compressor and outdoors for compressor intake air	11/13/2014	RMP Deemed	48.97	Hp
Outside air intake (Retrofit) - ID	Permanent ductwork between compressor and outdoors for compressor intake air	11/13/2014	RMP Deemed	48.97	hp
Compressed Air:Receiver capacity additionNon-Residential					
Receiver capacity addition (New Construction) - ID	Incremental receiver capacity in excess of 2 gal/scfm of trim compressor capacity	11/13/2014	RMP Deemed	13.1	Gal above 2 gal/scfm
Receiver capacity addition (Retrofit) - ID	Incremental receiver capacity in excess of 2 gal/scfm of trim compressor capacity	11/13/2014	RMP Deemed	13.1	Gal above 2 gal/scfm
Compressed Air:Refrigerated cycling dryerNon-Residential					
Refrigerated cycling dryer (New Construction) - ID	Cycling refrigerated dryer in place of non cycling refrigerated dryer	11/13/2014	RMP Deemed	12.73	Scfm/hr
Refrigerated cycling dryer (Retrofit) - ID	Cycling refrigerated dryer in place of non cycling refrigerated dryer	11/13/2014	RMP Deemed	12.73	Scfm/hr
Compressed Air:VFD controlled compressorNon-Residential					
VFD controlled compressor (New Construction) - ID	VFD compressor in place of fixed speed compressor (oil-flooded only, not oil-free)	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
VFD controlled compressor (Retrofit) - ID	VFD compressor in place of fixed speed compressor (oil-flooded only, not oil-free)	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Compressed Air:Zero loss condensate drainNon-Residential					
Zero loss condensate drain (New Construction) - ID	No-loss condensate drain in place of conventional timer drain	11/13/2014	RMP Deemed	786.37	Measure
Zero loss condensate drain (Retrofit) - ID	No-loss condensate drain in place of conventional timer drain	11/13/2014	RMP Deemed	786.37	Measure
Custom:ControlNon-Residential					
Control (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Control (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:ImprovementsNon-Residential					

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Improvements (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Improvements (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VFD CompressorNon-Residential					
VFD Compressor (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VFD Compressor (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Measure Category : Direct Install					
Custom:Direct InstallNon-Residential					
Project Savings - Small Business Direct Install - ID	Project Savings - Small Business Direct Install - UT	01/20/2018	null	Savings vary by Deemed Hours of Operation	Site-specific
Measure Category : Electronics					
Office Equipment:Smart Plug StripNon-Residential					
Smart Plug Strip - ID	Any plug strip that eliminates idle or stand-by power consumption of connected plug-lead appliance through the use of an occupancy sensor, electric load sensor, or timer.	01/20/2018	RTF Deemed	118	Measure
Plug Load:Advanced Power StripNon-Residential					
Advanced Power Strip - Small Business Dierct Install - ID	Non-Lighting - Advaned Power Strip	10/01/2016	null		Site-specific
Measure Category : Energy Management					
Custom:Industrial RecommissioningNon-Residential					
Industrial Recommissioning Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Persistent RecommissioningNon-Residential					
Persistent Recommissioning Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:RecommissioningNon-Residential					
Recommissioning Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Strategic Energy MgmtNon-Residential					
Strategic Energy Management Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Measure Category : Farm & Dairy					
Engine Block Timers:Agricultural engine block heater timerNon-Residential Agriculture					
Agricultural engine block heater timer (New Construction) - ID	Timer for cycling agricultural engine block heater	11/13/2014	RMP Deemed	512	Measure
Agricultural engine block heater timer (Retrofit) - ID	Timer for cycling agricultural engine block heater	11/13/2014	RMP Deemed	512	Measure
Fans:Circulating fanNon-Residential Agriculture					
Circulating fan: 12-23" diameter (New Construction) - ID	Circulation fan, small (12-23" diameter)	11/13/2014	RMP Deemed	419	Measure
Circulating fan: 12-23" diameter (Retrofit) - ID	Circulation fan, small (12-23" diameter)	11/13/2014	RMP Deemed	419	Measure
Circulating fan: 24-35" diameter (New Construction) - ID	Circulation fan, medium (24-35" diameter)	11/13/2014	RMP Deemed	486	Measure
Circulating fan: 24-35" diameter (Retrofit) - ID	Circulation fan, medium (24-35" diameter)	11/13/2014	RMP Deemed	486	Measure
Circulating fan: 36-47" diameter (New Construction) - ID	Circulation fan, large (36-47" diameter)	11/13/2014	RMP Deemed	557	Measure
Circulating fan: 36-47" diameter (Retrofit) - ID	Circulation fan, large (36-47" diameter)	11/13/2014	RMP Deemed	557	Measure
Circulating fan: >=48" diameter (New Construction) - ID	Circulation fan, extra large (>=48" diameter)	11/13/2014	RMP Deemed	1,460	Measure
Circulating fan: >=48" diameter (Retrofit) - ID	Circulation fan, extra large (>=48" diameter)	11/13/2014	RMP Deemed	1,460	Measure
Fans:ControllerNon-Residential Agriculture					
Programmable ventilation controller (New Construction) - ID	Controller for automatic switching of ventilation fans	11/13/2014	RMP Deemed	1,020	Measure
Programmable ventilation controller (Retrofit) - ID	Controller for automatic switching of ventilation fans	11/13/2014	RMP Deemed	1,020	Measure
Fans:High-efficiency ventilation systemNon-Residential Agriculture					
High-efficiency ventilation system: 12-23" diameter (New Construction) - ID	Ventilation fan, small (12-23" diameter)	11/13/2014	RMP Deemed	419	Measure
High-efficiency ventilation system: 12-23" diameter (Retrofit) - ID	Ventilation fan, small (12-23" diameter)	11/13/2014	RMP Deemed	419	Measure
High-efficiency ventilation system: 24-35" diameter (New Construction) - ID	Ventilation fan, medium (24-35" diameter)	11/13/2014	RMP Deemed	750	Measure
High-efficiency ventilation system: 24-35" diameter (Retrofit) - ID	Ventilation fan, medium (24-35" diameter)	11/13/2014	RMP Deemed	750	Measure
High-efficiency ventilation system: 36-47" diameter (New Construction) - ID	Ventilation fan, large (36-47" diameter)	11/13/2014	RMP Deemed	1,500	Measure
High-efficiency ventilation system: 36-47" diameter (Retrofit) - iD	Ventilation fan, large (36-47" diameter)	11/13/2014	RMP Deemed	1,500	Measure
High-efficiency ventilation system: >=48" diameter (New Construction) - ID	Ventilation fan, extra large (>=48" diameter)	11/13/2014	RMP Deemed	3,000	Measure
High-efficiency ventilation system: >=48" diameter (Retrofit) - ID	Ventilation fan, extra large (>=48" diameter)	11/13/2014	RMP Deemed	3,000	Measure
Fans:Variable Frequency DriveNon-Residential					
Potato or onion storage fan VFD - ID	Add variable frequency drive to existing or new fan in potato or onion storage.	12/22/2016	RMP Deemed	1,193	hp
Livestock Waterers:High-efficiency livestock watererNon-Residential Agriculture					

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
High efficiency livestock waterer (New Construction) - ID	High efficiency livestock waterer	11/13/2014	RMP Deemed	1,209	Measure
High efficiency livestock waterer (Retrofit) - ID	High efficiency livestock waterer	11/13/2014	RMP Deemed	1,209	Measure
Milkers:Milker Take OffNon-ResidentialAgriculture					
Automatic milker takeoffs (retrofit only) - ID	Automatic milker takeoff	11/13/2014	RMP Deemed	992	Measure
Refrigeration:Milk pre-coolerNon-ResidentialAgriculture					
Milk pre-cooler (New Construction) - ID	Precool milk with well water prior to refrigeration	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Milk pre-cooler (Retrofit) - ID	Precool milk with well water prior to refrigeration	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Vacuum Pump:Variable Frequency DrivesNon-Residential					
Variable frequency drive for dairy vacuum pump (retrofit only) - ID	Add VFD to dairy vacuum pump	12/22/2016	RMP Calculation	Savings vary by install configuration	site-specific
Water Heating:Heat reclaimerNon-ResidentialAgriculture					
Heat recovery (New Construction) - ID	Reclaim heat from refrigeration condenser to heat water	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Heat recovery (Retrofit) - ID	Reclaim heat from refrigeration condenser to heat water	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Measure Category : Food Service Equipment					
Cooking Equipment:FryerNon-Residential					
Electric Commercial Fryer: Tier 1 - ID	High Efficiency Energy Star qualified Commercial Fryer (Electric Only)	05/14/2016	RMP Deemed	1,689	Measure
Cooking Equipment:GriddleNon-Residential					
Electric Griddle: Tier 2 - ID	High Efficiency Energy Star Tier 2 qualified Electric Griddle	05/14/2016	RMP Deemed	2,595	Measure
Cooking Equipment:OvenNon-Residential					
Electric Combination Oven: (16-20 pans) - ID	High efficiency Electric Combination Oven with Heavy Load Efficiency	01/20/2018	RTF Deemed	17,877	Measure
Electric Combination Oven: (6-15 pans) - ID	High efficiency Electric Combination Oven with Heavy Load Efficiency	01/20/2018	RTF Deemed	12,990	Measure
Electric Convection Oven: Full Size - ID	High Efficiency Electric Convection Oven	01/20/2018	PP Deemed	1,661	Measure
Electric Convection Oven: Half Size - ID	High Efficiency Electric Convection Oven	01/20/2018	PP Deemed	1,683	Measure
Cooking Equipment:Steam CookerNon-Residential					
Electric Steam Cooker: 3-, 4-, 5- and 6-pan sizes - Tier 1 - ID	High Efficiency Energy Star qualified Electric Steam Cooker with a Cooking Efficiency >= 50%	05/14/2016	RMP Deemed	18,769	Measure
Electric Steam Cooker: 3-, 4-, 5- and 6-pan sizes - Tier 2 - ID	High Efficiency Energy Star qualified Electric Steam Cooker with a Heavy Load Efficiency >=68%	01/20/2018	RMP Deemed	37,362	Measure
Dishwashers:Commercial DishwasherNon-Residential					

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Commercial Dishwasher (Electric DHW): Multiple Tank Conveyor - ID	High Efficiency Commercial Energy Star qualified high temperature Multiple Tank Conveyor Dishwasher with electric booster using electically heated domestic water	05/14/2016	RMP Deemed	27,408	Measure
Commercial Dishwasher (Electric DHW): Single Tank Conveyor - ID	High Efficiency Commercial Energy Star qualified high temperature Single Tank Conveyor Dishwasher with electric booster using electically heated domestic water	05/14/2016	RMP Deemed	9,212	Measure
Commercial Dishwasher (Electric DHW): Stationary Rack, Single Tank, Door Type - ID	High Efficiency Commercial Energy Star qualified high temperature Stationary Rack, Single Tank, Door Type Dishwasher with electric booster using electically heated domestic water	05/14/2016	RMP Deemed	11,863	Measure
Commercial Dishwasher (Electric DHW): Undercounter - ID	High Efficiency Commercial Energy Star qualified high temperature Undercounter Dishwasher with electric booster using electically heated domestic water	05/14/2016	RMP Deemed	3,171	Measure
Commercial Dishwasher (Gas DHW): Multiple Tank Conveyor - ID	High Efficiency Commercial Energy Star qualified high temperature Multiple Tank Conveyor Dishwasher with electric booster using gas heated domestic water	05/14/2016	RMP Deemed	11,230	Measure
Commercial Dishwasher (Gas DHW): Single Tank Conveyor - ID	High Efficiency Commercial Energy Star qualified high temperature Single Tank Conveyor Dishwasher with electric booster using gas heated domestic water	05/14/2016	RMP Deemed	4,948	Measure
Commercial Dishwasher (Gas DHW): Stationary Rack, Single Tank, Door Type - ID	High Efficiency Commercial Energy Star qualified high temperature Stationary Rack, Single Tank, Door Type Dishwasher with electric booster using gas heated domestic water	05/14/2016	RMP Deemed	4,840	Measure
Commercial Dishwasher (Gas DHW): Undercounter - ID	High Efficiency Commercial Energy Star qualified high temperature Undercounter Dishwasher with electric booster using gas heated domestic water	05/14/2016	RMP Deemed	2,089	Measure
Freezers:Commercial FreezerNon-Residential					
Commercial Transparent Door Freezer: 30 <= V < 50 - ID	High Efficiency Energy Star qualified Commercial Transparent Door Freezer with an interior volume equal to (30 <= V < 50 cubic feet)	11/13/2014	RMP Deemed	1,504	Measure
Grocery Refrigeration:Refrigeration ControlsNon-Residential					
Anti-Sweat Heater Controls - Low Temp - ID	Anti-Sweat Heater Controls-RTF-Low Temp	01/20/2018	RTF Deemed	305	Linear ft.
Anti-Sweat Heater Controls - Med Temp - ID	Anti-Sweat Heater Controls-RTF-Med Temp	01/20/2018	RTF Deemed	217	Linear ft.
Holding Cabinet:Insulated Holding CabinetNon-Residential					
Electric Insulated Holding Cabinet: 13 <= V < 28 cu. ft. - ID	High Efficiency Energy Star qualified 3/4 Size Electric Insulated Holding Cabinet with internal volume of 13 <= V < 28 cubic feet	05/14/2016	RMP Deemed	2,770	Measure
Electric Insulated Holding Cabinet: < 13 cu. ft. - ID	High Efficiency Energy Star qualified 1/2 Size Electric Insulated Holding Cabinet	01/20/2018	RMP Deemed	253	Measure
Electric Insulated Holding Cabinet: >= 28 cu. Ft. - ID	High Efficiency Energy Star qualified Full Size Electric Insulated Holding Cabinet	01/20/2018	RMP Deemed	820	Measure
Ice Machine:Ice MachineNon-Residential					

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Program : wattsmart Business					
Ice Machines (Air-Cooled Only): Tier 1: Harvest Rate < 500 lbs/day - ID	High Efficiency Energy Star qualified Ice Machine with an ice harvest rate of less than 500 lbs per day	05/14/2016	RMP Deemed	748	Measure
Ice Machines (Air-Cooled Only): Tier 1: Harvest Rate >= 500 lbs/day - ID	High Efficiency Energy Star qualified Ice Machine with a ice harvest rate of equal to or greater than 500 lbs/ day	05/14/2016	RMP Deemed	2,410	Measure
Ice Machines (Air-Cooled Only): Tier 2: Harvest Rate < 500 lbs/day - ID	High Efficiency CEE Tier 2 qualified Ice Machine with an Ice harvest rate less than 500 lbs/day	05/14/2016	RMP Deemed	1,355	Measure
Ice Machines (Air-Cooled Only): Tier 2: Harvest Rate >= 500 lbs/day - ID	High Efficiency CEE Tier 2 qualified Ice Machine with an Ice harvest rate of equal to or greater than 500 lbs/day	05/14/2016	RMP Deemed	3,876	Measure
Ventilation:Kitchen VentilationNon-Residential					
Demand Controlled Kitchen Ventilation - ID	Demand Controlled Kitchen Ventilation	05/14/2016	RMP Calculation	Savings vary by install configuration	Measure
Measure Category : HVAC					
Controls and Thermostats:ControllerNon-Residential					
Occupancy Based PTHP/PTAC control - ID	Occupancy based PTHP/PTAC control, all sizes with no prior occupancy based control, retrofit only	05/14/2016	RMP Deemed	446	Measure
Controls and Thermostats:Controls and ThermostatsNon-Residential					
Advanced Rooftop Unit Control: => 5 tons and <= 10 tons - ID	Qualifying advanced rooftop unit control installed on existing rooftop unit w/ =>5 and <=10 nominal tons	01/20/2018	RMP Calculation	Site-Specific	null
Advanced Rooftop Unit Control: > 10 tons and <= 15 tons - ID	Qualifying advanced rooftop unit control installed on existing rooftop unit w/ >10 and <=15 nominal tons	01/20/2018	RMP Calculation	Site-Specific	null
Advanced Rooftop Unit Control: > 15 tons and <= 20 tons - ID	Qualifying advanced rooftop unit control installed on existing rooftop unit w/ >15 and <=20 nominal tons	01/20/2018	RMP Calculation	Site-Specific	null
Advanced Rooftop Unit Control: > 20 tons - ID	Qualifying advanced rooftop unit control installed on existing rooftop unit >20 nominal tons	01/20/2018	RMP Calculation	Site-Specific	null
Controls and Thermostats:ThermostatNon-Residential					
365/366 day Programmable Thermostat or Occupancy-based Thermostat- ID	365 day Programmable Thermosat	05/14/2016	RMP Deemed	1,310	Measure
Smart Thermostat - ID	Residential used in a business, see Home Energy Savings program requirements.	01/20/2018	RMP Calculation	Site-Specific	null
Cooling:Evaporative CoolerNon-Residential					
Evaporative Cooling - ID	Indirect or Direct Evaporative Cooling	05/14/2016	RMP Deemed	0.39	Cfm
Evaporative Pre-Cooler - Retrofit - ID	Use of evaporative cooling to pre-cool the air passing over a condensing coil included as part of building cooling system. For single air-cooled packaged rooftop or matched split system condensers only.	05/14/2016	RMP Deemed	202	Ton
Indirect-Direct Evaporative Cooling (IDEC) - ID	Indirect-direct Evaporative cooling	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Cooling:Unitary Commercial Air Conditioners, Air-CooledNon-Residential					
Unitary CAC (Air): < 65, 000 Btu/hr (single phase): Single Package - CEE Advanced Tier - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled < 65,000 Btu/hr, single package	01/20/2018	RMP Calculation	Savings vary by install configuration	null

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Unitary CAC (Air): < 65, 000 Btu/hr (single phase): Single Package - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled < 65,000 Btu/hr, single package	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Unitary CAC (Air): < 65, 000 Btu/hr (single phase): Split System - CEE Advanced Tier - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled < 65,000 Btu/hr, split system	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Unitary CAC (Air): < 65, 000 Btu/hr (single phase): Split System - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled < 65,000 Btu/hr, split system	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Unitary CAC (Air): All equipment sizes (three phase): Single Package - CEE Advanced Tier - ID	CEE Tier 1, High Efficiency Air Conditioner Air Cooled, All equipment sizes, single package	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Unitary CAC (Air): All equipment sizes (three phase): Single Package - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled, All equipment sizes, single package	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Unitary CAC (Air): All equipment sizes (three phase): Split System - CEE Advanced Tier - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled, All equipment sizes, split system	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Unitary CAC (Air): All equipment sizes (three phase): Split System - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Air Conditioner Air Cooled, All equipment sizes, split system	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Cooling:Unitary Commercial Air Conditioners, Water and Non-Residential					
Unitary CAC (Evaporative) All equipment sizes: Single Package - CEE Tier 1 - ID	High Efficiency Air Conditioner Water and Evaporatively Cooled, Single Package	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Unitary CAC (Evaporative): All equipment sizes: Split System - CEE Tier 1 - ID	High Efficiency Air Conditioner Water and Evaporatively Cooled, Split System	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Unitary CAC (Water): All equipment sizes: Single Package - CEE Tier 1 - ID	High Efficiency Air Conditioner Water and Evaporatively Cooled, Single Package	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Unitary CAC (Water): All equipment sizes: Split System - CEE Tier 1 - ID	High Efficiency Air Conditioner Water and Evaporatively Cooled, Split System	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Chiller Non-Residential					
Chiller (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Chiller (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:CO2 Air Controls Non-Residential					
CO2 Air Controls (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
CO2 Air Controls (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Cooling Tower - VFD Fan Non-Residential					
Cooling Tower - VFD Fan (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Cooling Tower - VFD Fan (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:DDC Non-Residential					
DDC (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
DDC (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
Custom:Economizer		Non-Residential			
Economizer (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Economizer (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Evaporative Cooler		Non-Residential			
Evaporative Cooler (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Evaporative Cooler (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Fan Controls		Non-Residential			
Fan Controls (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Fan Controls (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Fan-Powered VAV		Non-Residential			
Fan-Powered VAV (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Fan-Powered VAV (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Garage CO Fan Conts		Non-Residential			
Garage CO Fan Conts (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Garage CO Fan Conts (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Groundwater-Source Heat Pumps		Non-Residential			
Groundwater-Source Heat Pumps (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Groundwater-Source Heat Pumps (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Heat Pump		Non-Residential			
Heat Pump (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Heat Pump (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Heat Recovery		Non-Residential			
Heat Recovery (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Heat Recovery (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
Custom:High-Effic. Air Cond. Non-Residential					
High-Effic. Air Cond. (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
High-Effic. Air Cond. (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Other HVAC Non-Residential					
Other HVAC (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Other HVAC (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Package HVAC Non-Residential					
Package HVAC (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Package HVAC (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Premium RTU Non-Residential					
Premium RTU (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Premium RTU (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VAV Non-Residential					
VAV (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VAV (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VFD Fan Non-Residential					
VFD Fan (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VFD Fan (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VFD Pump Non-Residential					
VFD Pump (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VFD Pump (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Water-Loop Heat Pump Non-Residential					
Water-Loop Heat Pump (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Water-Loop Heat Pump (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
Heat Pump:Heat Pump - Ground Source		Non-Residential			
HP - Ground (Heating & Cooling Mode): Closed Loop - ID	Ground Source Heat Pump Loop (closed loop)	05/14/2016	RMP Deemed	519	Ton
HP - Ground (Heating & Cooling Mode): Heat Pump, Ground Source - ID	High Efficiency heat pumps (Ground source or groundwater)	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Ground (Heating & Cooling Mode): Open Loop - ID	Groundwater Source Heat Pump Loop (open loop)	05/14/2016	RMP Deemed	637	Ton
Heat Pump:Heat Pump - Packaged Terminal		Non-Residential			
PTHP (Heating & Cooling Mode): <= 8,000 Btu/hr: Single package - ID	High Efficiency package terminal heat pumps <= 8,000 Btu/hr,Single package	05/14/2016	RMP Deemed	298	Ton
PTHP (Heating & Cooling Mode): > 13,500 Btu/hr: Single package - ID	High Efficiency package terminal heat pumps > 13,500 Btu/hr,Single package	05/14/2016	RMP Deemed	325	Ton
PTHP (Heating & Cooling Mode): > 8,000 Btu/hr and < 10,500 Btu/hr: Single package - ID	High Efficiency package terminal heat pumps > 8,000 Btu/hr and < 10,500 Btu/hr,Single package	05/14/2016	RMP Deemed	293	Ton
PTHP (Heating & Cooling Mode): >= 10,500 Btu/hr and <= 13,500 Btu/hr: Single package - ID	High Efficiency package terminal heat pumps >= 10,500 Btu/hr and <= 13,500 Btu/hr,Single package	05/14/2016	RMP Deemed	159	Ton
Heat Pump:Heat Pumps - Air-Cooled - Cooling Mode		Non-Residential			
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (single phase): Single Package - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Single Package heat pump air cooled < 65, 000 Btu/hr, single phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (single phase): Split System - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Split System heat pump air cooled < 65, 000 Btu/hr, single phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (three phase): Single Package - CEE Tier 1 - ID	CEE Tier 1, High Efficiency Single Package heat pump air cooled < 65, 000 Btu/hr, three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (three phase): Split System - CEE Tier 1 - ID	CEE Tier 1, High Efficiency Split System heat pump air cooled < 65, 000 Btu/hr, three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Heat Pump:Heat Pumps - Air-Cooled - Heating Mode		Non-Residential			
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (single phase): Single Package - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Single Package heat pump air cooled < 65, 000 Btu/hr, single phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (single phase): Split System - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Split System heat pump air cooled < 65, 000 Btu/hr, single phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (three phase): Single Package - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Single Package heat pump air cooled < 65, 000 Btu/hr, three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): < 65, 000 Btu/hr (three phase): Split System - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Split System heat pump air cooled < 65, 000 Btu/hr, three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Single Package - 17°F db/15°F wb outdoor air - CEE Tier 1 - ID	CEE Tier 1, High Efficiency Single Package heat pump air cooled >= 65,000 Btu/hr and : 17°F db/15°F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Single Package - 17°F db/15°F wb outdoor air - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Single Package heat pump air cooled >= 65,000 Btu/hr and : 17°F db/15°F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	null
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Single Package - 47°F db/43°F wb outdoor air - CEE Tier 1	CEE Tier 1, High Efficiency Single Package heat pump air cooled >= 65,000 Btu/hr and : 47F db/15F wb outdoor	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific

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Program : wattsmart Business					
- ID	air three phase				
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Single Package - 47°F db/43°F wb outdoor air - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Single Package heat pump air cooled >= 65,000 Btu/hr and : 47F db/15F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	null
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Split System - 17°F db/15°F wb outdoor air - CEE Tier 1 - ID	CEE Tier 1, High Efficiency Split System heat pump air cooled >= 65,000 Btu/hr and : 17°F db/15°F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Split System - 17°F db/15°F wb outdoor air - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Split System heat pump air cooled >= 65,000 Btu/hr and : 17°F db/15°F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	null
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Split System - 47°F db/43°F wb outdoor air - CEE Tier 1 - ID	CEE Tier 1, High Efficiency Split System heat pump air cooled >= 65,000 Btu/hr and : 47F db/15F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Air (Heating & Cooling Mode): >= 65,000 Btu/hr (three phase): Split System - 47°F db/43°F wb outdoor air - CEE Tier 2 - ID	CEE Tier 2, High Efficiency Split System heat pump air cooled >= 65,000 Btu/hr and : 47F db/15F wb outdoor air three phase	01/20/2018	RMP Calculation	Savings vary by install configuration	null
Heat Pump:Heat Pumps - VRF Water-CooledNon-Residential					
VRF Water-Cooled Heat Pump (Heating & Cooling Mode): < 135,000 Btu/hr - CEE Tier 1 - ID	CEE Tier 1, High Efficiency variable refrigerant flow heat pump water cooled	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Heat Pump:Heat Pumps - Water-SourceNon-Residential					
HP - Water (Heating and Cooling Mode): < 135,000 Btu/hr: CEE Tier 1 - ID	CEE Tier 1 High Efficiency water source heat pumps	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
HP - Water (Heating Mode): < 135,000 Btu/hr: CEE Tier 1 - ID	CEE Tier 1 High Efficiency water source heat pumps	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Measure Category : Irrigation					
Custom:Pivots and Linear SystemsNon-Residential					
Center Pivot Replacing Set Move System (Retrofit) - ID	New center pivot replacing previous (non-pivot) system	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Sprinkler Package Replacement (Retrofit) - ID	Replace sprinkler package on pivot or linear	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Pump UpgradesNon-Residential					
Pump Replacement / Rebuild (Retrofit) - ID	Replace or rebuild irrigation pump	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Pump Upgrades (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Pump Upgrades (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:System RedesignNon-Residential					
System Redesign (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
System Redesign (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
System Redesign (Retrofit) - ID	Redesign irrigation system, including distribution equipment	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Variable Frequency Drives		Non-Residential			
Irrigation Pump VFD - ID	Add VFD to irrigation pump	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Wheel Line/Hand Line Equipment		Non-Residential			
Upgrade Wheel Line / Hand Line Equipment (Retrofit) - ID	Replace wheel lines, handlines, and/or components thereof	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Irrigation Pumps:Variable Frequency Drives		Non-Residential			
Irrigation pump VFD - ID	Add VFD to existing or new irrigation pump	01/01/2018	PP Calculation	Savings vary by install configuration - see attached calculator	Site-specific
Water Distribution Equipment:Center Pivot Equipment		Non-Residential			
Center pivot base boot gasket - ID	Replace leaking center pivot base boot gasket	01/01/2018	PP Deemed	1,423.76	Measure
Center pivot tower gasket - ID	Replace leaking tower gasket with new tower gasket	01/01/2018	PP Deemed	35.59	Measure
Drop tube (3 ft minimum length) - ID	New drop tube OR add drop tube as part of conversion to low pressure system.	01/01/2018	PP Deemed	7.48	Measure
Gooseneck as part of conversion to low pressure system - ID	New gooseneck as part of conversion to low pressure system	01/01/2018	PP Deemed	7.48	Measure
Sprinkler Pressure Regulator Package (Custom) - ID	New pivot or linear pressure regulators replacing worn pressure regulators.	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Water Distribution Equipment:Nozzles, Gaskets & Drains		Non-Residential			
Drain for wheel line, hand line, portable main line, pivot, or linear - ID	New drain replacing leaking drain	01/01/2018	PP Deemed	169.25	Measure
Flow control nozzle - ID	New flow control nozzle for impact sprinkler replacing existing nozzle or worn flow control nozzle of same design flow or less	01/01/2018	PP Deemed	40.62	Measure
Gasket for wheel line, hand line, or portable main line - ID	Replace leaking gasket, including mainline valve or section gasket, seal, or riser cap	01/01/2018	PP Deemed	163.3	Measure
Nozzle - ID	New nozzle replacing worn nozzle of same design flow or less on existing sprinkler	01/01/2018	PP Deemed	40.62	Measure
Water Distribution Equipment:Pivots and Linear Systems		Non-Residential			
Low pressure sprinkler replacing impact sprinkler - ID	Replace impact sprinkler with low pressure sprinkler	01/01/2018	PP Deemed	49.49	Measure
Low pressure sprinkler replacing worn low pressure sprinkler - ID	Replace low pressure sprinkler with low pressure sprinkler	01/01/2018	PP Deemed	49.94	Measure
Pressure regulator - ID	Replace sprinkler pressure regulator or, in conversion from higher pressure system, add new pressure regulator	01/01/2018	PP Deemed	47.98	Measure
Water Distribution Equipment:Wheel Line/Hand Line Equipment		Non-Residential			

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Program : wattsmart Business					
Impact sprinkler - ID	New or rebuilt impact sprinkler replacing worn or leaking impact sprinkler	01/01/2018	PP Deemed	27.29	Measure
Pipe repair - ID	Cut and press or weld repair of leaking wheel line, hand line, or portable main line.	01/01/2018	PP Deemed	81.25	Measure
Rotating sprinkler - ID	New rotating sprinkler replacing worn or leaking impact or rotating sprinkler	01/01/2018	PP Deemed	27.29	Measure
Thunderbird wheel line hub - ID	New Thunderbird wheel line hub replacing leaking hub	01/01/2018	PP Deemed	70.31	Measure
Wheel line feed hose - ID	New or rebuilt wheel line feed hose replacing leaking wheel line feed hose	01/01/2018	PP Deemed	163.53	Measure
Wheel line leveler - ID	New or rebuild wheel line leveler replacing leaking or malfunctioning leveler	01/01/2018	PP Deemed	40.49	Measure

Measure Category : Lighting

Controls:Custom		Non-Residential			
General Illumination Lighting Control - Retrofit - Custom - ID	Custom General Illumination Lighting Control, control not listed in tariff incentive tables	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific

Controls:Exterior Dimming Control		Non-Residential			
Exterior Dimming Control - New Construction/Major Renovation - ID	Must control LED tech in an ext light application. Control must be integral to LED fixture or fixture-mounted and reduce fixture power by 75% or more for a min of 6 hrs per night or when the space has been unoccupied for 15 min or less.	01/20/2018	RMP Deemed	Savings vary by install configuration	Site-specific

Exterior Lighting:Custom		Non-Residential			
Exterior General Illuminance Lighting - New Construction/Major Renovation - Custom - ID	Custom General Illumination Lighting, exterior fixture or lamp not listed in tariff incentive tables	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific

Exterior Lighting:LED		Non-Residential			
LED Canopy/Soffit Fixture - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Canopy/Soffit fixture	05/14/2016	RMP Deemed	460	Measure
LED Flood Light Fixture - < 100 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Flood Light fixture, < 100 W	05/14/2016	RMP Deemed	679	Measure
LED Flood Light Fixture - >= 100 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Flood Light fixture, >= 100 W	05/14/2016	RMP Deemed	1,183	Measure
LED Outdoor Pole/Roadway Decorative Fixture - < 75 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Outdoor Pole/Roadway decorative fixture	05/14/2016	RMP Deemed	460	Measure
LED Outdoor Pole/Roadway Fixture - <= 200 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Outdoor Area and Roadway fixture, <= 200 W	05/14/2016	RMP Deemed	1,095	Measure
LED Outdoor Pole/Roadway Fixture - > 200 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Outdoor Area and Roadway fixture, > 200 W	05/14/2016	RMP Deemed	3,285	Measure
LED Wall Pack Fixture - < 50 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Wall Pack fixture, < 50 W	05/14/2016	RMP Deemed	460	Measure
LED Wall Pack Fixture - >= 50 W - New Construction/Major Renovation - ID	New construction/major renovation exterior LED Wall Pack fixture, >= 50 W	05/14/2016	RMP Deemed	657	Measure

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
General Illuminance:Custom		Non-Residential			
Custom - Retrofit - ID	Custom lighting measure. Must save energy over baseline. Lighting product must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
General Illuminance:Exterior Lighting		Non-Residential			
Ext. Controls-only Upgrade to Advanced Dimming Controls - Retrofit - ID	Exterior lighting system upgrades, controls only. Controls must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Fixture Retrofit Kits w/ Advanced Dimming Controls - Retrofit - ID	Exterior lighting upgrades, retrofit kits with advanced dimming lighting controls. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Fixture Retrofit Kits w/ No Controls - Retrofit - ID	Exterior lighting system upgrades, retrofit kits only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Full Fixture Replacement w/ Advanced Dimming Controls - Retrofit - ID	Exterior lighting upgrades, full fixture replacement with advanced dimming controls. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Full Fixture Replacement w/ No Controls - Retrofit - ID	Exterior lighting system upgrades, fixture replacement only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Street Lighting w/ Advanced Dimming Controls - Retrofit - ID	Exterior lighting system upgrades, w advanced only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Ext. Street Lighting w/ No Controls - Retrofit - ID	Exterior lighting system upgrades, w no only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Exterior Lighting - Retrofit - ID	Lighting Retrofits Exterior - ID	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Street/Pole - ID	null	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
General Illuminance:InteriorLighting		Non-Residential			
Int. Controls-only Upgrade to Advanced Controls - Retrofit - ID	Interior lighting system upgrades, controls only. Controls must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Controls-only Upgrade to Basic Controls - Retrofit - ID	Interior lighting system upgrades, controls only. Controls must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Fixture Retrofit Kits w/ Basic or Advanced Controls - Retrofit - ID	Interior lighting system upgrades, retrofit kits only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Fixture Retrofit Kits w/ No Controls - Retrofit - ID	Interior lighting system upgrades, retrofit kits only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Full Fixture Replacement w/ Advanced Controls - Retrofit - ID	Interior lighting ystem upgrades, full fixture replacement with basic controls. LED and control system must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Full Fixture Replacement w/ Basic Controls - Retrofit - ID	Interior lighting system upgrades, fixture replacement only. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Int. Full Fixture Replacement w/ No Controls - Retrofit - ID	Interior lighting ystem upgrades, full fixture replacement with advanced controls. LED and control system must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
Interior Lighting - Retrofit - ID	Lighting Retrofits Interior- ID	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
General Illuminance:LED		Non-Residential			
LED - Exterior Fixture - Wall Pack - Small Business Direct Install - ID	LED Fixture. Must be on the Qulified List	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED - Exterior Fixture - Area Flood - Small Business Direct Install - ID	LED Fixture. Must be on the Qulified List	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED - Exterior Fixture - Entryway Wall Pack - Small Business Direct Install - ID	LED Fixture. Must be on the Qulified List	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED A-19 Lamp < 8 W, Medium Base - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	35.3	null
LED A-19 Lamp < 8 W, Medium Base - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED A-19 Lamp >= 8 W, Medium Base - MID - ID	A-19 Lamp >= 8 W. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	46.1	null
LED A-19 Lamp >= 8 W, Medium Base - Retrofit - ID	LED lighting system upgrades, a 19 Lamp. A must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED A-21 Lamp >= 12 W, Medium Base - MID - ID	A-21 Lamp >= 12 W. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	59.3	null
LED A-21 Lamp >= 12 W, Medium Base - Retrofit - ID	LED lighting system upgrades, a 21 Lamp. A must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED BR Reflector Lamp - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	56.8	null
LED BR Reflector Lamp - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED Decorative Lamp - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	41	null
LED Decorative Lamp - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED Fixture - Retrofit - High and Low Bay - Small Business Direct Install - ID	High and Low Bay LED Fixture, High and Low Bay	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Fixture - Retrofit - Troffer Kit - 4 Lamp 48" Prismatic - Small Business Direct Install - ID	LED Fixture. Must be on the Qulified List	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Fixture - Retrofit for HO and VHO Fixture Kit - Small Business Direct Install - ID	Energy E fficient Light Emitting Diode Lamps-General Purpose	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED HID Replacement Lamp < 40 W - MID - ID	Corn cob relamp < 40 Watts; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	300.6	null
LED HID Replacement Lamp < 40 W - Retrofit - ID	Corn cob relamp < 40 Watts; LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED HID Replacement Lamp >= 150 W - MID - ID	HID Replacement Lamp >= 150 Lamp. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	2,213.5	null
LED HID Replacement Lamp >= 150 W - Retrofit - ID	LED lighting system upgrades, hid replacement lamp >= 150w Retrofit. HID Replacement Lamp >= 150W must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED HID Replacement Lamp >= 40 and < 80 W - MID - ID	Corn cob relamp >= 40 W and <80 W; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	518	null
LED HID Replacement Lamp >= 40 and < 80 W - Retrofit - ID	HID Replacement Lamp >= 80W and < 150 Lamp. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
LED HID Replacement Lamp >= 80 and < 150 W - MID - ID	LED lighting system upgrades, hid replacement lamp >= 80w and < 150w Replacement. HID Replacement Lamp >= 80W and < 150W must be advanced dimming controls.	01/20/2018	RMP Deemed	1,247.8	null
LED HID Replacement Lamp >= 80 W and < 150 W - Retrofit - ID	Corn cob relamp >= 40 W and <80 W; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	Site-Specific	null
LED MR16 Reflector Lamp - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	62.7	null
LED MR16 Reflector Lamp - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED PAR Reflector Lamp - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	92.9	null
LED PAR Reflector Lamp - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED PLC Pin-based Lamp < 10 W - MID - ID	PLC Pin-based L10 based Lamp. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	50.8	null
LED PLC Pin-based Lamp < 10 W - Retrofit - ID	LED lighting system upgrades, plc pin Pin. PLC Pin must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED PLC Pin-based Lamp >= 10 W - MID - ID	PLC Pin-based Lamp >= 10 based. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	48	null
LED PLC Pin-based Lamp >= 10 W - Retrofit - ID	LED lighting system upgrades, plc pin Pin. PLC Pin must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED PLL Pin-based Lamp - MID - ID	PLL Pin-based LED based Lamp. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	56.4	null
LED PLL Pin-based Lamp - Retrofit - ID	LED lighting system upgrades, pll pin based Lamp. PLL Pin must be advanced dimming controls.	01/20/2018	RMP Calculation	Site-Specific	null
LED Recessed Downlight Kit - MID - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	47.2	null
LED Recessed Downlight Kit - Retrofit - ID	LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED Tubular - Retrofit - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Wall Pack Fixture < 50 W - MID - ID	LED Wall Pack 15W-50W; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	577.1	null
LED Wall Pack Fixture < 50 W - Retrofit - ID	LED Wall Pack 15W-50W; LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED Wall Pack Fixture < 50 W with Occupancy Sensor - MID - ID	LED wall pack fixture. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	692.5	null
LED Wall Pack Fixture < 50 W with Occupancy Sensor - Retrofit - ID	LED wall pack fixture. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
LED Wall Pack Fixture >= 50 W - MID - ID	LED Wall Pack 15W-50W; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	577.1	null
LED Wall Pack Fixture >= 50 W - Retrofit - ID	LED Wall Pack 15W-50W; LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
LED Wall Pack Fixture >= 50 W with Occupancy Sensor - MID - ID	LED wall pack fixture. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	692.5	null
LED Wall Pack Fixture >= 50 W with Occupancy Sensor - Retrofit - ID	LED wall pack fixture. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null

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Program : wattsmart Business					
T5 TLED Lamp - Type A, A/B Dual Mode - MID - ID	TLED Lamp T5 Type A. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
T5 TLED Lamp - Type A, A/B Dual Mode - Retrofit - ID	TLED Lamp T5 Type A. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
T8 TLED Lamp - Type A, A/B Dual Mode - MID - ID	TLED Lamp T8 Type C. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	48.9	null
T8 TLED Lamp - Type A, A/B Dual Mode - Retrofit - ID	TLED Lamp T8 Type C. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
T8 TLED Lamp - Type B - MID - ID	12W-22W; LED must be listed on qualified equipment list	01/20/2018	RMP Deemed	65.4	null
T8 TLED Lamp - Type B - Retrofit - ID	12W-22W; LED must be listed on qualified equipment list	01/20/2018	RMP Calculation	Site-Specific	null
T8 TLED Lamp - Type C - MID - ID	TLED Lamp T8 Type B. LED must be listed on qualified equipment lists.	01/20/2018	RMP Deemed	76.4	null
T8 TLED Lamp - Type C - Retrofit - ID	TLED Lamp T8 Type B. LED must be listed on qualified equipment lists.	01/20/2018	RMP Calculation	Site-Specific	null
General Illuminance:Non-eligible fixtureNon-Residential					
Non-eligible fixture - New Construction/ Major Renovation - ID	Any installed fixture not eligible for incentives and does not contribute to project savings.	01/20/2018	RMP Calculation	Savings vary by install configuration	Site-specific
Non-eligible fixture - Retrofit - ID	Any installed fixture not eligible for incentives, but that contributes to reported project savings.	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
General Illuminance:T5 FluorescentNon-Residential					
T5 HO Fluorescent Lamp - MID - Reduced Wattage - ID	< = 51W T5HO Replacement Lamp	01/20/2018	RMP Deemed	21.2	null
T5 HO Fluorescent Lamp - Retrofit - Reduced Wattage - ID	< = 51W T5HO Replacement Lamp	01/20/2018	RMP Calculation	Site-Specific	null
General Illuminance:T8 FluorescentNon-Residential					
T8 Fluorescent Lamp - MID - Reduced Wattage - ID	< = 28W CEE Replacement Lamp	01/20/2018	RMP Deemed	11.9	null
T8 Fluorescent Lamp - Retrofit - Reduced Wattage - ID	< = 28W CEE Replacement Lamp	01/20/2018	RMP Calculation	Site-Specific	null
General Service Lamps:LEDNon-Residential					
LED General Purpose - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-General Purpose	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Pin Based - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Pin based Horizontal Mount	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
Interior Lighting:CustomNon-Residential					
Interior Lighting - New Construction/Major Renovation - Custom - ID	Custom Lighting, interior lighting not subject to energy code.	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Lighting:Interior LightingNon-Residential					
Interior Lighting and Lighting Control - NCMR - ID	Offers prescriptive and/or custom incentives for qualifying lighting equipment	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Lighting:Package LightingNon-Residential					
Package Lighting NCMR - ID	Offers prescriptive and/or custom incentives for qualifying lighting equipment	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific

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Program : wattsmart Business					
Package Lighting Retrofit - ID	Offers prescriptive and/or custom incentives for qualifying lighting equipment	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Non-General Illuminance:CustomNon-Residential					
Non General Illuminance Lighting - Retrofit - Custom - ID	Custom Non-General Illumination Lighting, fixture or lamp not listed in tariff incentive tables	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Non-General Illuminance:Exterior Lighting ControlNon-Residential					
Exterior Dimming Control - Retrofit - ID	Must control LED tech in an ext lighting application. Control must be integral to LED fixture or fix-mounted and reduce fix power by 75% or more for a min of 6 hrs per night or when the space has been unoccupied for 15 min or less.	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
Non-General Illuminance:LEDNon-Residential					
LED Channel Letter Sign - Retrofit - ID	LED replacing existing neon or fluorescent lamps in a channel letter sign	05/14/2016	RMP Deemed	17	Linear ft.
LED Exit Sign - Retrofit - ID	LED or photoluminecent exit sign replacing incandescent of fluorescent exit sign	05/14/2016	RMP Calculation	Savings vary by install configuration	Site-specific
LED Marquee/Cabinet Sign - Retrofit - ID	LED replacing existing fluorescent lighting in a marquee or cabinet sign	05/14/2016	RMP Deemed	21	Linear ft.
LED Message Center Sign - Retrofit - ID	LED replacing existing incandescent lamps in a message center sign	05/14/2016	RMP Deemed	47	Measure
Non-General Illuminance:Refrigerated Case LightingNon-Residential					
LED Case Lighting Freezer Case (Retrofit Only) - ID	LED replacing fluorescent lamp in refrigerated cases. LED must be listed on qualified equipment list.	01/20/2018	RMP Deemed	75.66	Linear ft.
LED Case Lighting Refrigerated Case (Retrofit Only) - ID	LED replacing fluorescent lamp in refrigerated cases. LED must be listed on qualified equipment list.	01/20/2018	RMP Deemed	54.93	Linear ft.
Refrigerated Case Occupancy Sensor (Retrofit Only) - ID	Installed in existing refrigerated case with LED lighting.	01/20/2018	RMP Deemed	18	Linear ft.
Specialty Lamps:LEDNon-Residential					
LED PAR - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Pin-based - Reflector Lamp - Small Buiness Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Specialty - Candelabra - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
LED Specialty - MR 16 - Small Business Direct Install - ID	Energy efficient Light Emitting Diode Lamps-Specialty	10/01/2016	null	Savings vary by Deemed Hours of Operation	Site-specific
Measure Category : Motors					
Custom:Electronically Commutated MotorNon-Residential					
Electronically Commutated Motor (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific

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Program : wattsmart Business					
Electronically Commutated Motor (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Other MotorsNon-Residential					
Other Motors (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Other Motors (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Pump MotorsNon-Residential					
Pump Motors (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Pump Motors (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Pump with VFDNon-Residential					
Pump with VFD (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Pump with VFD (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VFD MotorsNon-Residential					
VFD Motors (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VFD Motors (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:VSDNon-Residential					
VSD (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
VSD (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Electronically Commutated Motor:Electronically CommutatedNon-Residential					
Electronically Commutated Motor: <= 1 horsepower: Refrigeration application - ID	Electronically Commutated Motor (ECM) used in a refrigeration application	05/14/2016	RMP Deemed	9.3	Watt
Electronically Commutated Motor: <=1 horsepower: HVAC application - ID	Electronically Commutated Motor (ECM) used in an HVAC application	05/14/2016	RMP Deemed	2,895	Hp
Green Motor Rewinds:Green Motor Rewinds (Agriculture)Non-Residential					
Green Motor Rewinds (Agriculture): 100 hp - ID	100 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,040	Measure
Green Motor Rewinds (Agriculture): 1000 hp - ID	1000 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	10,192	Measure
Green Motor Rewinds (Agriculture): 125 hp - ID	125 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency	01/20/2018	RTF Deemed	1,157	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
	using controlled rewind process				
Green Motor Rewinds (Agriculture): 1250 hp - ID	1250 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	10,590	Measure
Green Motor Rewinds (Agriculture): 15 hp - ID	15 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	317	Measure
Green Motor Rewinds (Agriculture): 150 hp - ID	150 hpGreen Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,376	Measure
Green Motor Rewinds (Agriculture): 1500 hp - ID	1500 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	12,681	Measure
Green Motor Rewinds (Agriculture): 1750 hp - ID	1750 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	14,732	Measure
Green Motor Rewinds (Agriculture): 20 hp - ID	20 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	425	Measure
Green Motor Rewinds (Agriculture): 200 hp - ID	200 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,821	Measure
Green Motor Rewinds (Agriculture): 2000 hp - ID	2000 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	16,766	Measure
Green Motor Rewinds (Agriculture): 2250 hp - ID	2250 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	18,744	Measure
Green Motor Rewinds (Agriculture): 25 hp - ID	25 hpGreen Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	595	Measure
Green Motor Rewinds (Agriculture): 250 hp - ID	250 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	2,823	Measure
Green Motor Rewinds (Agriculture): 2500 hp - ID	2500 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	20,783	Measure
Green Motor Rewinds (Agriculture): 30 hp - ID	30 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	640	Measure
Green Motor Rewinds (Agriculture): 300 hp - ID	300 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	3,370	Measure

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Green Motor Rewinds (Agriculture): 3000 hp - ID	3000 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	24,784	Measure
Green Motor Rewinds (Agriculture): 350 hp - ID	350 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	3,929	Measure
Green Motor Rewinds (Agriculture): 3500 hp - ID	3500 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	28,854	Measure
Green Motor Rewinds (Agriculture): 40 hp - ID	40 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	746	Measure
Green Motor Rewinds (Agriculture): 400 hp - ID	400 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	4,456	Measure
Green Motor Rewinds (Agriculture): 4000 hp - ID	4000 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	32,976	Measure
Green Motor Rewinds (Agriculture): 450 hp - ID	450 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	5,003	Measure
Green Motor Rewinds (Agriculture): 4500 hp - ID	4500 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	37,021	Measure
Green Motor Rewinds (Agriculture): 50 hp - ID	50 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	802	Measure
Green Motor Rewinds (Agriculture): 500 hp - ID	500 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	5,567	Measure
Green Motor Rewinds (Agriculture): 5000 hp - ID	5000 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	41,049	Measure
Green Motor Rewinds (Agriculture): 60 hp - ID	60 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	765	Measure
Green Motor Rewinds (Agriculture): 600 hp - ID	600 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	6,193	Measure
Green Motor Rewinds (Agriculture): 700 hp - ID	700 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	7,195	Measure
Green Motor Rewinds (Agriculture): 75 hp - ID	75 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using	01/20/2018	RTF Deemed	788	Measure

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
	controlled rewind process				
Green Motor Rewinds (Agriculture): 800 hp - ID	800 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	8,205	Measure
Green Motor Rewinds (Agriculture): 900 hp - ID	900 hp Green Motor Rewind for motor used in agriculture, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	9,211	Measure
Green Motor Rewinds:Green Motor Rewinds (Industrial)Non-Residential					
Green Motor Rewinds (Industrial): 100 hp - ID	100 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	2,005	Measure
Green Motor Rewinds (Industrial): 1000 hp - ID	1000 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	24,172	Measure
Green Motor Rewinds (Industrial): 125 hp - ID	125 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	2,598	Measure
Green Motor Rewinds (Industrial): 1250 hp - ID	1250 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	29,973	Measure
Green Motor Rewinds (Industrial): 15 hp - ID	15 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	601	Measure
Green Motor Rewinds (Industrial): 150 hp - ID	150 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	3,089	Measure
Green Motor Rewinds (Industrial): 1500 hp - ID	1500 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	35,891	Measure
Green Motor Rewinds (Industrial): 1750 hp - ID	1750 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	41,697	Measure
Green Motor Rewinds (Industrial): 20 hp - ID	20 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	804	Measure
Green Motor Rewinds (Industrial): 200 hp - ID	200 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	4,088	Measure
Green Motor Rewinds (Industrial): 2000 hp - ID	2000 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	47,454	Measure
Green Motor Rewinds (Industrial): 2250 hp - ID	2250 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible	01/20/2018	RTF Deemed	53,051	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

Measures Effective on 04/03/2018

		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
	efficiency using controlled rewind process				
Green Motor Rewinds (Industrial): 25 hp - ID	25 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,052	Measure
Green Motor Rewinds (Industrial): 250 hp - ID	250 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	4,972	Measure
Green Motor Rewinds (Industrial): 2500 hp - ID	2500 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	58,823	Measure
Green Motor Rewinds (Industrial): 30 hp - ID	30 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,133	Measure
Green Motor Rewinds (Industrial): 300 hp - ID	300 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	5,935	Measure
Green Motor Rewinds (Industrial): 3000 hp - ID	3000 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	70,147	Measure
Green Motor Rewinds (Industrial): 350 hp - ID	350 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	6,919	Measure
Green Motor Rewinds (Industrial): 3500 hp - ID	3500 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	81,667	Measure
Green Motor Rewinds (Industrial): 40 hp - ID	40 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,319	Measure
Green Motor Rewinds (Industrial): 400 hp - ID	400 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	7,848	Measure
Green Motor Rewinds (Industrial): 4000 hp - ID	4000 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	93,334	Measure
Green Motor Rewinds (Industrial): 450 hp - ID	450 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	8,811	Measure
Green Motor Rewinds (Industrial): 4500 hp - ID	4500 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	104,783	Measure
Green Motor Rewinds (Industrial): 50 hp - ID	50 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,418	Measure

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Green Motor Rewinds (Industrial): 500 hp - ID	500 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	9,804	Measure
Green Motor Rewinds (Industrial): 5000 hp - ID	5000 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	116,183	Measure
Green Motor Rewinds (Industrial): 60 hp - ID	60 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,476	Measure
Green Motor Rewinds (Industrial): 600 hp - ID	600 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	14,689	Measure
Green Motor Rewinds (Industrial): 700 hp - ID	700 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	17,065	Measure
Green Motor Rewinds (Industrial): 75 hp - ID	75 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	1,519	Measure
Green Motor Rewinds (Industrial): 800 hp - ID	800 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	19,461	Measure
Green Motor Rewinds (Industrial): 900 hp - ID	900 hp Green Motor Rewind for motor used in an industrial application, returning motor to best possible efficiency using controlled rewind process	01/20/2018	RTF Deemed	21,847	Measure

Measure Category : Refrigeration

Controls:Adaptive Refrigeration ControllerNon-Residential					
Adaptive Refrigeration Controller (Retrofit) - ID	Replace conventional controls with adaptive controls and, in some instances, electric expansion valves.	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:2-Stage AmmoniaNon-Residential					
2-Stage Ammonia (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
2-Stage Ammonia (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Box InsulationNon-Residential					
Box Insulation (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Box Insulation (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Case/Point of Sale LightingNon-Residential					
Case/Point of Sale Lighting (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific

Rocky Mountain Power Energy Efficiency Measures for Idaho

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
Case/Point of Sale Lighting (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:CO2 Scrubber Non-Residential					
CO2 Scrubber (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
CO2 Scrubber (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Compressor VFD Non-Residential					
Compressor VFD (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Compressor VFD (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Condenser Fan VFDs Non-Residential					
Condenser Fan VFDs (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Condenser Fan VFDs (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Condensing Press Cont Non-Residential					
Condensing Press Cont (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Condensing Press Cont (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Controls Refrigeration Non-Residential					
Controls Refrigeration (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Controls Refrigeration (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:EE Evaporator Coils Non-Residential					
EE Evaporator Coils (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
EE Evaporator Coils (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Evap & AirCool Condense Non-Residential					
Evap & AirCool Condense (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Evap & AirCool Condense (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Evaporator Fan VFD Non-Residential					
Evaporator Fan VFD (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Evaporator Fan VFD (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
Custom:Evaporator System		Non-Residential			
Evaporator System (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Evaporator System (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Fan VFDs		Non-Residential			
Fan VFDs (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Fan VFDs (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Floating Head Press Cont		Non-Residential			
Floating Head Press Cont (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Floating Head Press Cont (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Floating Suction Control		Non-Residential			
Floating Suction Control (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Floating Suction Control (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:HE Evaporative Fan		Non-Residential			
HE Evaporative Fan (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
HE Evaporative Fan (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Heat Pump Desuper		Non-Residential			
Heat Pump Desuper (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Heat Pump Desuper (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:High Speed Doors		Non-Residential			
High Speed Doors (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
High Speed Doors (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:High-Effic. Cases		Non-Residential			
High-Effic. Cases (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
High-Effic. Cases (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install	Site-specific

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		Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
Program : wattsmart Business					
				configuration	
Custom:Humidistat / Anti-Sweat		Non-Residential			
Humidistat / Anti-Sweat (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Humidistat / Anti-Sweat (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Other Refrigeration		Non-Residential			
Other Refrigeration (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Other Refrigeration (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Package Refrigeration		Non-Residential			
Package Refrigeration (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Package Refrigeration (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Plate Cooler		Non-Residential			
Plate Cooler (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Plate Cooler (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Solid Door Refrigerator		Non-Residential			
Solid Door Refrigerator (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Solid Door Refrigerator (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Custom:Warm Gas Defrost		Non-Residential			
Warm Gas Defrost (New Construction wCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Warm Gas Defrost (Retrofit & NCMR woCode) Custom - ID	Custom engineering for industrial and large commercial	01/01/2017	RMP Calculation	Savings vary by install configuration	Site-specific
Fast Acting Door:Fast Acting Door		Non-Residential			
Fast Acting Door (Retrofit) - ID	Replace manually operated door, automatic door with long cycle time, strip curtain, or entryway with no door with fast acting door.	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific
Measure Category : Wastewater					
Wastewater:Aeration		Non-Residential			
Extended Range Circulator (Retrofit) - ID	Address excess aeration with extended range circulator.	11/13/2014	RMP Calculation	Savings vary by install configuration	Site-specific

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Measures Effective on 04/03/2018

	Effective Date	Energy Savings Calculation method	Gross incremental annual electric savings (kWh/yr)	Savings unit
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Program : wattsmart Business



Appendix 7

National Energy Foundation Idaho Report

2017

NEF

BE WATTSMART,
BEGIN AT HOME
IDAHO

Program Report

Prepared for:



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Rocky Mountain Power

201 South Main, Suite 2300

Salt Lake City, UT 84111

Prepared by:

Patti Clark

Program Manager

National Energy Foundation

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Salt Lake City, UT 84107

March 21, 2018

Savings

Teacher ID:
Teacher Name:

Be wattsmart
Begin at home

Home Energy Worksheet

Student First Name:

Heating

1. Install and use a programmable or smart thermostat.
☐ Currently do ☐ Will do ☐ Neither

2. Caulk windows and weather strip outside doors.
☐ Have done ☐ Will do ☐ Neither

3. Inspect attic insulation and add insulation if needed.
☐ Have done ☐ Will do ☐ Neither

4. Keep furnace or flares clean/inspected regularly.
☐ Currently do ☐ Will do ☐ Neither

Cooling

5. Replace existing air conditioning unit with a high efficiency unit or an evaporative cooling unit.
☐ Have done ☐ Will do ☐ Neither

6. Close blinds when windows are exposed to the sun.
☐ Currently do ☐ Will do ☐ Neither

7. Use a fan instead of air conditioning.
☐ Currently do ☐ Will do ☐ Neither

8. In the summer, set thermostat to 78 degrees F or higher.
☐ Currently do ☐ Will do ☐ Neither

Water heating

9. Set the water heater temperature to 120 degrees F.
☐ Have done ☐ Will do ☐ Neither

10. Install a high-efficiency showerhead.
☐ Have done ☐ Will do ☐ Neither

11. Take 5 minute showers.
☐ Currently do ☐ Will do ☐ Neither

12. Wash full loads in the dishwasher and clothes washer.
☐ Currently do ☐ Will do ☐ Neither

Lighting

13. Replace incandescent bulbs with LED bulbs.
☐ Have done ☐ Will do ☐ Neither

14. Turn lights off when not in use.
☐ Currently do ☐ Will do ☐ Neither

Refrigeration

15. Replace old, inefficient refrigerator with an ENERGY STAR® model.
☐ Have done ☐ Will do ☐ Neither

16. Unplug old freezers/refrigerators and/or dispose of them in an environmentally safe manner.
☐ Have done ☐ Will do ☐ Neither

17. Maintain refrigerator and freezer coils and check door seals twice yearly.
☐ Currently do ☐ Will do ☐ Neither

Electronics

18. Turn off computers, TVs and game consoles when not in use.
☐ Currently do ☐ Will do ☐ Neither

Cooking

19. Use a microwave oven, toaster oven, crock pot or outdoor grill instead of a conventional oven.
☐ Currently do ☐ Will do ☐ Neither

Get paid for being wattsmart

20. Visit Rocky Mountain Power at wattsmart.com for more energy-saving tips and ideas.
☐ Have done ☐ Will do ☐ Neither

WAT ID:

Be wattsmart
Begin at home

ROCKY MOUNTAIN POWER
Let's turn the planet on.

Home Energy Worksheets

– Returned: 1,136 –

– 80.28% –

Teacher Name:

School:

Sponsor: Rocky Mountain Power

Be wattsmart
Begin at home

In an effort to improve our program, we would like your assessment of the wattsmart Begin at home. Please take a few minutes to fill out this evaluation form. Upon completion, please return the form in the postage-paid envelope along with the student Home Energy Worksheets you collected and the sponsor Thank a Watt Card.

Please mark the box that best describes your opinion.

Strongly Agree	Agree	Disagree	Strongly Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The materials were attractive and easy to use.

The materials and activities were well-received by students.

The materials were clearly written and well-organized.

Students indicated that their parents supported the program.

Presenters were able to keep students engaged and attentive.

If you had the opportunity would you conduct this program again?
☐ Yes ☐ No

Would you recommend this program to other colleagues?
☐ Yes ☐ No

In my opinion, the thing students liked best about the materials/program was:

One thing I would change would be:

WAT ID:

Be wattsmart
Begin at home

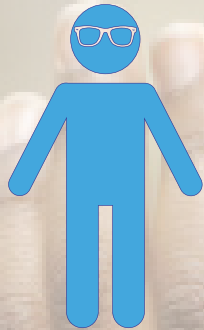
ROCKY MOUNTAIN POWER
Let's turn the planet on.

Teacher Packets

– Returned: 54 –

– 88.52% –

Participants



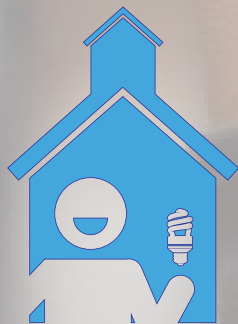
Students

– 1,414 –



Teachers

– 61 –



Schools

– 19 –

1 school had 2 presentations
due to student numbers

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Program Overview

Program Description

Be *wattsmart*, Begin at home, an energy efficiency education program, is a collaborative partnership between Rocky Mountain Power and the National Energy Foundation (NEF). This unique and interactive program teaches the importance of energy and natural resources and their impact on the environment. The objective is to expand and promote energy awareness through a school-based education program which encourages Idaho students and teachers to change behaviors which will impact the energy consumption in their homes and community. Teachers are also provided teaching materials to support further classroom instruction on this valuable message.

The program expanded in 2017 to include schools within the Rocky Mountain Power territory in the state of Idaho. Approximately 30 schools were placed on the qualified school list with one school disqualified as it is a K-3rd grade only.

Program Administration

Be *wattsmart*, Begin at home is administered by NEF, a non-profit organization (established in 1976) dedicated to the development, dissemination and implementation of supplementary educational materials, programs and services relating primarily to energy, energy safety, the environment and natural resources. Our mission remains constant, to cultivate and promote an energy literate society. NEF is pleased to report on activities of the Be *wattsmart*, Begin at home energy efficiency education program conducted during the 2017 – 2018 school year.

Anne Lowe, Vice President – Operations, oversees program organization. Gary Swan, Vice President – Development, oversees contract accounting. Janet Hatch, Program Director, is responsible for overseeing the scope of work. Patti Clark, Program Manager, is responsible for implementing the scope of work and Diane Baum is responsible for scheduling the presentations. A team of trained and seasoned presenters brought the interactive, hands-on program to Idaho Schools.

Building Collaborations

The Idaho Content Curriculum Standards were adopted by the Idaho State Department of Education for all K-12 students within the state. The Be *wattsmart*, Begin at home program aligns appropriately with the 4th grade standards. Teachers appreciate the collaborative efforts to align program components to their learning standards. Curriculum correlations were provided to teacher participants in their *Teacher Materials Folder* delivered to each teacher prior to the presentation date.

Program Implementation

This new program was implemented in the Fall of 2017. Principals of eligible schools were sent a letter to introduce the new program offered by Rocky Mountain Power and teachers were initially emailed with follow-up calls from Patti Clark to introduce the program. Questions were addressed and highlights of the program content were introduced to teachers with an emphasis on how the program aligns with Idaho Content Standards.

Program Registration

Registration for the program was online at wattsmart.com/begin. Each registered school was checked against the qualified school list before email and phone communication was made with teachers to determine optimum presentation dates and student numbers.

After registration was qualified, a series of email communications with teachers, were sent automatically by the program registration website. The website calculated *Home Energy Worksheet* returns as well as earned gift card levels and communicated this information to the participant. Later communications were customized through programming to be sent only to teachers needing a reminder to return their program documents.

Be wattsmart, Begin at home Presentation

Be wattsmart, Begin at home presentations were given during the month of October 2017 avoiding the various scheduled Harvest recesses. The presentation featured a custom Keynote slideshow that brought energy concepts to the forefront of Idaho education. The presentation focused on important concepts, such as natural resources, electrical generation, the energy mix used by Rocky Mountain Power to generate electricity and tips for energy efficiency in the home.

The presentation provided interactive activities that involved and engaged the audience. Students participated in making a human electrical circuit, during which they learned key core curriculum concepts such as insulators and conductors of electricity and electrical generation. Student volunteers used props to demonstrate the process of electrical generation for their classmates. All students reviewed material learned with an “Energy Lingo” review activity at designated points throughout the presentation. To help students remember energy efficiency tips, participants watched Slim the Lineman energy efficiency video vignettes. At the end of each short video, students learned a rhyme about Slim’s wise energy choice.

The last portion of the presentation communicated the importance of the program take-home pieces. These documents enabled households to participate in energy education along with students.

Program Materials

A *Parent Letter* was provided to explain the importance of Be wattsmart, Begin at home. In addition, students took home a *Student Guide* and *Home Energy Worksheet* to share with their families. Students who returned their worksheet received an Energy Star® rated nightlight featuring the Rocky Mountain Power logo as a reward.

Educators were also given helpful energy educational materials. Each teacher participant was provided a custom Be wattsmart, Begin at home folder. The folder contained a custom *Teacher Guide* with additional information and activities to supplement and continue energy education in the classroom. Also in the folder were two NEF instructional posters, *Energy Efficiency In Action* and *Electricity Serves Our Community*.

A program *Implementation Steps Flier* assisted teachers in carrying out the program. It also gave simple steps for successfully returning *Home Energy Worksheets*, the *Program Evaluation* and the sponsor *Thanks a “Watt” Card* in the postage paid envelope provided in the *Teacher Materials Folder*. A *Rewarding Results Flier* gave information concerning the mini-grant that teacher participants could receive for returning their student surveys. Educators received a \$50 gift card for an 80% return, or a \$25 gift card for a 50 – 79% return by the December 1, 2017 deadline.

Program Accomplishments – Fall 2017

- 20 Be wattsmart, Begin at home presentations completed at 19 schools (schools that had over 160 students were approved for two presentations).
- 1,414 students and families reached
- 61 Idaho teachers reached
- 80.28% student *Home Energy Worksheet* surveys return
- \$50 mini-grant checks delivered to 48 Idaho teachers
- \$25 mini-grant checks delivered to 6 Idaho teachers

Program Attachments – Fall 2017

- Fall 2017 Participating Schools
- Program Promotions
- Program Documents

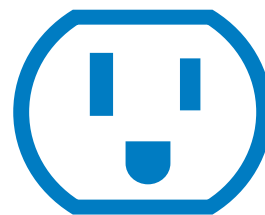
- Keynote Presentation
- *Teacher Implementation Steps Flier*
- *Rewarding Results Flier*
- *Student Guide*
- *Teacher Guide*
- Lingo Card
- Idaho Core Curriculum Correlations
- *Parent Letter*
- *Teacher Evaluation*
- *Teacher Evaluation Compilation*
- *Home Energy Worksheet*
- *Home Energy Worksheet Summary – Rocky Mountain Power*
- *Wise Energy Behaviors in Rocky Mountain Power Idaho Homes*
- Sampling of Thanks a “Watt” Cards

Attachments

Fall 2017 Participating Schools

School Name	School Address	School City	State
Adams Elementary	110 North 2nd East	Rexburg	Idaho
AJ Winters Elementary	535 Clay St.	Montpelier	Idaho
Ammon Elementary	2900 Central	Ammon	Idaho
Farnsworth Elementary	305 N 3700 E	Rigby, Idaho	Idaho
Georgetown Elementary	142 Stringtown Road	Georgetown	Idaho
Harold B Lee Elementary	4726 W. Hwy. 36	Weston	Idaho
Harwood Elementary	200 W 3rd N	Rigby	Idaho
Hibbard Elementary	2413 N 3000 W	Rexburg	Idaho
Hillview Elementary	3075 Teton St	Ammon	Idaho
Iona Elementary	5338 Owens Avenue	Iona	Idaho
Kennedy Elementary	60 S 5th W	Rexburg	Idaho
Lincoln Elementary	358 East 2nd South	Rexburg	Idaho
Lindy Ross Elementary	526 South Oakley Street	Dubois	Idaho
Mountain View Elem	704 Bannock St	McCammon	Idaho
Oakwood Elementary	525 South 400 East	Preston	Idaho
Paris Elementary School	39 South Fielding Street	Paris	Idaho
Rimrock Elementary	4855 Brennan Bend	Ammon	Idaho
Roberts Elementary	682 North	2858 East	Idaho
South Fork Elementary	7163 S 2000 W	Rexburg	Idaho

Be **watt**smart Begin at home



August 2017

Dear Administrator:

Your school is invited to participate in **Be wattsmart, Begin at home**. This exciting energy education program, sponsored by Rocky Mountain Power, is new to the state of Idaho and will be available in October 2017. The program focuses on the Idaho State Department of Education Fourth-Grade Content Standards while showing students and teachers how wise energy actions make a difference through an interactive assembly.

This program is available to your fourth-grade students **AT NO COST TO YOUR SCHOOL**.

Energy education specialists from the National Energy Foundation (NEF), a nonprofit organization, help students think critically about energy and efficiency with hands-on activities.

Implementing the program is easy!

- Teachers will receive a *Teacher Guide*, full-color energy posters and other instructional materials to reinforce energy education in the classroom.
- Teachers who participate in the program will have the chance to receive a classroom **Visa® gift card up to \$50**, subject to meeting eligibility requirements.

Please encourage your fourth-grade teachers to participate this year. Enroll at your earliest convenience to ensure a spot by visiting wattsmart.com/begin. For questions or additional information, please email Diane Baum at diane.baum@nefl.org or call 1-800-616-8326 ext. 146.

We look forward to your school's participation.



wattsmart.com





Be **wattsmart** Begin at home

Enroll your fourth-grade
students in our engaging
energy efficiency program.

Be wattsmart, Begin at home



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Be **wattsmart** Begin at home

Be wattsmart, Begin at home

reinforces electricity core curriculum in an engaging and interactive assembly. Participating teachers receive free energy education posters, activities and student materials, as well as the chance to receive a Visa® gift card of up to \$50.

Presentations will be held in October 2017. Sign up today at wattsmart.com/begin.



Program Documents

Keynote Presentation

Be **watt**smart,
Begin at home



PACIFIC POWER

What we will do today.

Learn about natural
resources.

Learn how we make and use
energy.

Learn how to use energy
wisely by being **watt**smart.

Play energy LINGO.



What is
ENERGY?



ENERGY is the
ability to do
WORK.

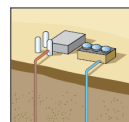
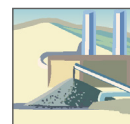
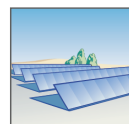


Natural resources

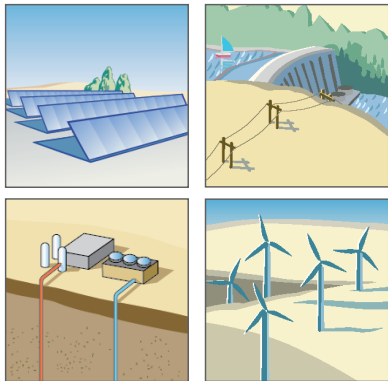
A **natural resource** is anything we use that
comes from the earth or the sun.



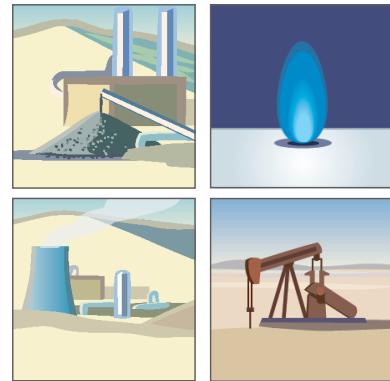
Renewable and nonrenewable resources



Renewable resources

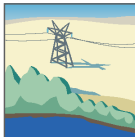


Nonrenewable resources



Electricity

- The electricity we use is not a natural resource.
- It is made from natural resources.
- Since electricity is made from natural resources, it is called a **secondary energy source**.
- Power lines carry the electricity from where it is generated to where it is used.



Let's LINGO

Find the words on your LINGO board that match these definitions:

- The ability to do work. **Energy**
- A resource often found with oil. **Natural gas**
- A secondary energy source. **Electricity**
- Something useful from the earth or the sun. **Natural resource**



Pacific Power

Electric generation by energy source

Coal 58.85%



Renewables 17.08%



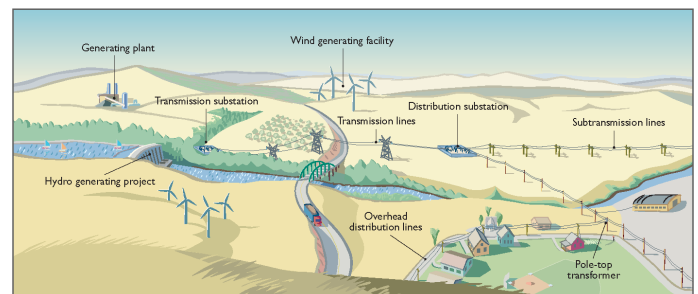
Natural gas 14.76%



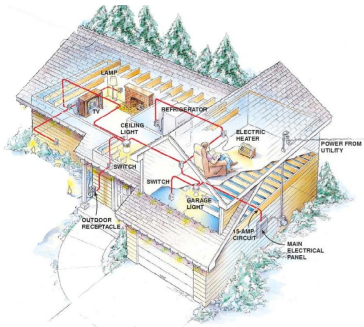
Other sources 9.31%



Electric generation



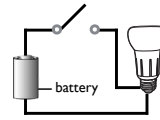
What is a circuit?



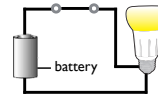
Let's make a circuit.

What things do we need to make an electrical circuit?

- An **energy source**, such as a battery.
- A **conductor** to carry electrical energy, such as wire.
- A **load** to use the energy, such as a light bulb.



Open circuit:
No electricity can flow



Closed circuit:
Electricity can flow



Energy efficiency

Energy efficiency

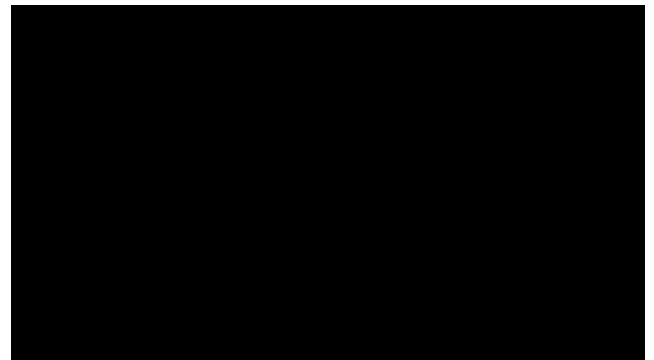
- Using less energy to accomplish the same amount of work.

Technology

- Install energy-efficient products, appliances and devices.

Behavior

- Use less energy through wise behaviors that conserve energy.

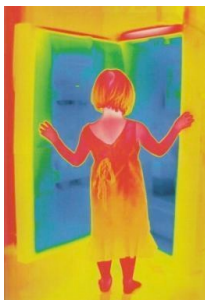


Know what you want before you open the refrigerator.

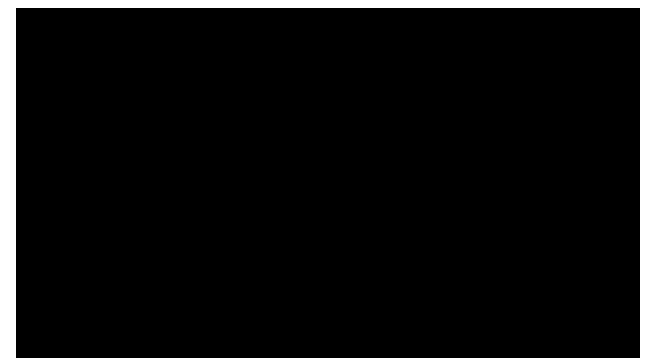


Refrigerators and freezers

What can you do to be **wattsmart**?

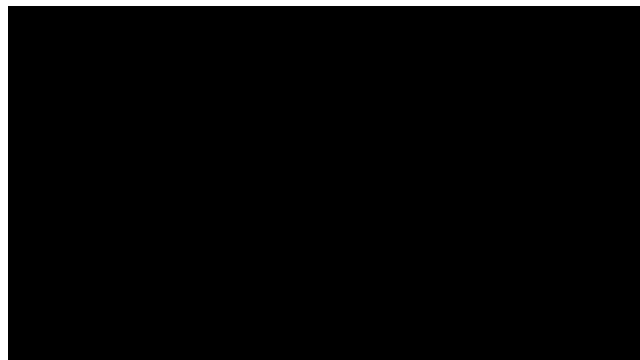


Decide what you want
to eat quickly!



Use LEDs





Turn off the TV when you leave the room.

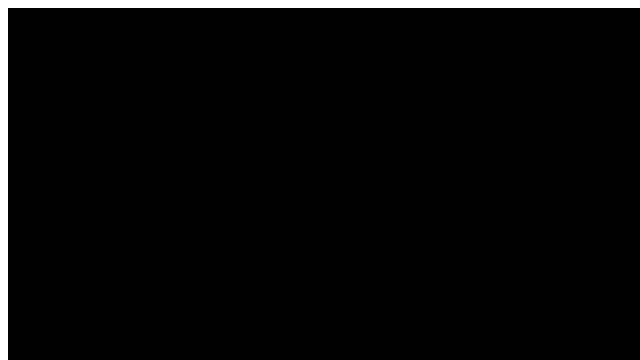


Electronics

What can you do to be **watts**smart?



- Turn off TVs, computers and game consoles when not in use.
- Unplug the thug. Beware of **phantom loads**.
- Use advanced power strips to reduce phantom load.



Turn off the lights when you leave the room.



Lighting

What can you do to be **watts**smart?



Turn off the lights when you leave a room.

Replace standard bulbs with **LED** (light-emitting diode) light bulbs.

Let daylight shine in.



Let's LINGO

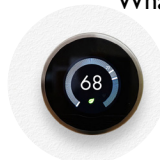
Find the words on your LINGO board that match these definitions:

- Using less energy to accomplish the same amount of work. **Energy efficiency**
- An energy resource that is capable of being renewed or is replaceable. **Renewable**
- Fossil fuels – such as coal, natural gas and oil – are considered **Nonrenewable** resources.
- A resource used to produce gasoline. **Oil**



Home heating and cooling

What can you do to be **watts**smart?



- Use a fan instead of an air conditioner.
- Install a smart or programmable thermostat.
- Change furnace filters.
- Insulate your home and seal air leaks.



Water heating

What can you do to be **wattsmart**?

- Install a water-efficient showerhead.
- Take shorter showers.
- Turn off the water when brushing teeth.
- Set your **water heater** to 120°F.



Dishwashers and laundry

What can you do to be **wattsmart**?



- Run these appliances only when full.
- Use low energy settings.
- Clean the lint filter on your dryer with each load.



Cooking

What can you do to be **wattsmart**?



- Use a microwave oven when possible.
- Use lids to shorten **cooking** time.



The 3 Rs

What can you do to be **wattsmart**?

- **Reduce**
– use less of something.
- **Reuse**
– use something again.
- **Recycle**
– make something into another new thing.



Let's LINGO

Find the words on your LINGO board that match these definitions:

- A light that can last 25 times longer than an incandescent. **LED**
- Electricity consumed by an electronic device while it is turned off or in standby mode. **Phantom load**
- Using a toaster oven or microwave for **Cooking** is more energy-efficient than using the oven.
- Set this to 120°F for a **Water heater** comfortable shower.
- To use less of something. **Reduce**



What have we done today?

- **Learned** why energy is important.
- **Discussed** energy and where it comes from.



Engage

Review your **Be wattsmart, Begin at home** booklet with your parent(s).

Complete the *Home Energy Worksheet* and return it to receive an energy-efficient nightlight.

Sign the *Thanks A “Watt” Card* and your teacher will mail it along with your worksheet and the teacher’s *Program Evaluation*.



YOU can make a
difference when you are
wattsmart!

Visit **bewattsmart.com**
for more energy-saving ideas.



Be **wattsmart**
Begin at home



Teacher Program Implementation Steps

1. Verify that you have received each of the following:

- *Teacher Materials Folder*
 - Your **Be wattsmart, Begin at home** *Student Booklet*
 - Your **Be wattsmart, Begin at home** *Teacher Guide*
 - *Program Evaluation*
 - *Sponsor Thank You Card*
 - Teacher Visa® gift card announcement
 - Self-addressed postage-paid return envelope
 - Instructional posters
- *Home Energy Worksheets* for you and your students
- **Be wattsmart, Begin at home** student booklets
- Set of *Parent Letters*
- wattsmart nightlights (student incentive for returning the *Home Energy Worksheet*)
- wattsmart Starter Kit Fliers

2. Distribute to each student a:

- **Be wattsmart, Begin at home** student booklet
- *Home Energy Worksheet*
- *Parent Letter*
- wattsmart Starter Kit Flier

3. Reward each student who returns a completed *Home Energy Worksheet* with a wattsmart nightlight.

4. Complete the *Program Evaluation* form.

5. Have each student sign the *Thank You Card* to Rocky Mountain Power.

6. Mail in the self-addressed, postage-paid envelope:

- Completed *Home Energy Worksheet*
- The *Thank You Card*
- The *Program Evaluation* form

To thank you for postmarking your envelope by December 2, 2016, you will receive a Visa® gift card for classroom use.

80% or greater return of registered students' *Home Energy Worksheets* = \$50

50 – 79% return of registered students' *Home Energy Worksheets* = \$25

For questions or additional information, please email Diane Baum at diane.baum@nef1.org.

WATT-ID

Be **watt**smart

Begin at home



Dear Parent(s):

The **Be wattsmart, Begin at home** program assists teachers and students to learn about energy, discuss important energy topics and engage in energy efficiency actions now. Your child has participated in a presentation addressing natural resources, energy basics and energy efficiency. Your participation in this program will help you be wattsmart, enhance energy efficiency in your home and help save money on your utility bills. Here are three simple ways that you can help:

- Review this **Be wattsmart, Begin at home** booklet with your child.
- Assist your child with completing the activities on Page 7.
- Have your child return the **Home Energy Worksheet** to his or her teacher.
- Order a wattsmart Starter Kit.

Thank you for being wattsmart and for your participation!

What's inside?

This booklet is divided into three sections that will help you:

1. **Learn** about sources of energy, how they get to your home and why they are important in your life.
2. **Discuss** wattsmart energy efficiency tips that will help you use energy wisely and save money.
3. **Engage in energy efficiency** by determining how energy can be saved in your home through a simple audit activity and the *Home Energy Worksheet*.

About Rocky Mountain Power

Rocky Mountain Power is committed to the delivery of reliable electric service that's safe, low-cost and increasingly from clean, renewable resources. Serving more than 1 million customers in Utah, Idaho and Wyoming, the company is one of the lowest cost energy producers in the nation. Rocky Mountain Power is moving toward a sustainable energy future that includes increased use of solar, wind and other renewable resources; and provides customers with more choices to meet their energy needs.

About the National Energy Foundation

The National Energy Foundation (NEF) is a 501 (c)(3) nonprofit organization, founded in 1976. It is dedicated to increasing energy literacy through the development, distribution and implementation of educational programs and materials. These resources relate primarily to energy, natural resources, energy efficiency, energy safety and the environment. Concepts are taught through science, math, art, technology and writing. NEF recognizes the importance of educating individuals about energy so they can make informed decisions about energy issues and use.

What does it mean to be **watt**smart?

- Being wattsmart is all about taking steps to save energy – which in turn can help you save money.
- Rocky Mountain Power's wattsmart programs and incentives can help customers become more energy efficient in their homes and businesses and that's good for their wallets and the environment.



The importance of energy:

Energy is the ability to do work or produce change. Virtually everything we do or use at work and home uses energy.

- Heating and cooling systems
- Computers
- Electronic equipment such as gaming and entertainment systems and TVs
- Charging electronic tablets, music players and cell phones
- Appliances
- Lights
- Manufacturing
- Food storage and preparation
- Security systems



Where does energy come from?

Our energy comes from natural resources. There are two general categories of natural resources – nonrenewable and renewable. A nonrenewable resource is not capable of being renewed, replaced or takes a very long time to replace. A renewable resource is capable of being renewed or replaced.

PRIMARY NATURAL RESOURCES are used to convert energy into electricity. They can be either nonrenewable or renewable.

Nonrenewable examples are:



Coal is the most abundant nonrenewable energy source in the world. There is an estimated 129 year supply remaining.



Oil can be both refined and unrefined. Refined oil is transformed into petroleum products and unrefined oil remains as crude oil.



Natural Gas is usually captured alongside oil deposits and is a major source for electrical generation.



Uranium is the fuel most widely used by nuclear plants. Nuclear energy is the energy inside the nucleus (core) of the atom of uranium.

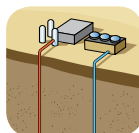
Renewable examples are:



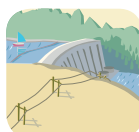
Solar is energy from the sun.



Wind is energy from the wind captured by a group of wind turbines (generators).



Geothermal is energy derived from the heat of the earth.



Hydropower is energy from water that generates electricity.

SECONDARY ENERGY RESOURCES are created by using nonrenewable and renewable resources of energy.



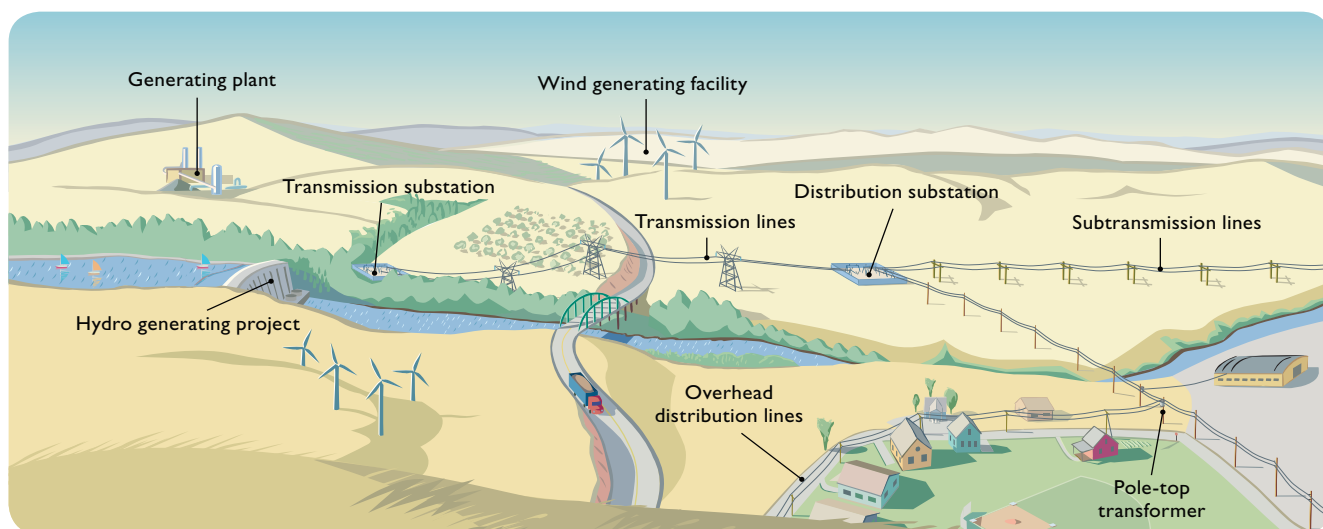
Electricity is the most abundant **secondary energy resource** used. It is the flow of electrical power or charge. It occurs in nature as lightning and static electricity. A generator uses energy resources to create mechanical energy that is then converted into electrical energy.

Energy efficiency

Energy efficiency is using less energy to accomplish the same amount of work – we call it being wattsmart. There are many technologies we can use today that decrease the amount of energy needed to do work. Good examples are ENERGY STAR® products and LED lighting.

You can save even more money if you start thinking about using energy wisely. Try turning off the lights when you leave the room, take shorter showers or turn off your electronics when you are not using them.

Using electricity



For more than 100 years, electricity has made our homes more comfortable and industries more productive. Today electricity is powering a world of electronics.

How is electricity generated? It begins with a fuel that heats water and turns it to steam. The steam drives the turbine that turns the generator motor to produce electricity.

How is electricity transmitted? Once the electricity is produced, the current flows from the generator to the power plant transformer where the voltage is increased to boost the flow of the electric current through the transmission lines. The transmission lines transport the electricity to Rocky Mountain Power's substations where the voltage is decreased. Power lines then carry the electricity from the substations to be used in our homes and businesses.

ELECTRICAL GENERATION

Energy resource	Rocky Mountain Power (2016 basic fuel mix)*	United States (U.S. EPA, 2013 data)
Coal	58.85%	39%
Natural gas	14.76%	27%
Renewables	17.08%	12%
Hydroelectric	5.58%	7%
Wind	8.97%	4%
Biomass	0.44%	1%
Geothermal	0.41%	--
Solar	1.68%	0%
Nuclear	0.00%	19%
Other/misc.	9.31%	3%
Total*	100%	100%

*This information is based on Federal Energy Regulatory Commission Form 1 data. The Rocky Mountain Power "basic fuel mix" is based on energy production and not resource capability, capacity or delivered energy. All or some of the renewable energy attributes associated with wind, solar, biomass, geothermal and qualifying hydro facilities in Rocky Mountain Power's basic fuel mix may be: (a) used in future years to comply with renewable portfolio standards or other regulatory requirements, (b) sold to third parties in the form of renewable energy credits and/or other environmental commodities or (c) excluded from energy purchased. Rocky Mountain Power's basic fuel mix includes owned resources and purchases from third parties.

wattsmart tips to lower your energy use and help save money

Saving energy happens in two ways. First, you can use less energy through wise behaviors that conserve energy. Second, you can install energy-efficient products, appliances and devices that use less energy to accomplish the same task. Let's talk about the following areas of your home that have the largest potential to save energy.

Home heating and cooling

- Install a programmable thermostat or smart thermostat. Set your thermostat to 78°F or higher in the summer and 68°F or lower in the winter.
- Make sure your house is properly insulated. If you have less than 6 inches of insulation in your attic, you would benefit from adding more.
- You can save 10 percent or more on your energy bill by reducing the air leaks in your home with caulking and weather stripping.
- To help your furnace run more efficiently and cost-effectively, keep your air filters clean.
- For windows with direct sunlight, close your blinds in the summer to keep the heat out. Open them on winter days to let the warmth in.
- Small room fans are an energy-efficient alternative to air conditioning.
- Inspect and replace weather stripping and caulking in your home.
- For information about energy-saving programs and cash incentives, visit **wattsmart.com**.



Water and water heating

- Check your faucets for leaks that can cost you hundreds of dollars each year.
- Install a water-efficient showerhead and save as much as \$145 a year.
- Set the water heater at 120°F.
- Install faucet aerators to decrease water use.

Lighting

- Let the sun shine in. Use daylight and turn off lights near windows when possible.
- Replace your incandescent bulbs with LEDs (light-emitting diodes) and save \$5 to \$8 per year per bulb. These bulbs use up to 80 percent less energy than incandescent bulbs and last much longer.
- Use lighting controls such as motion detectors and timers.
- Turn off lights when you leave the room.
- Always use the lowest wattage bulb that still gives you the light you need.
- Keep your light bulbs clean. It increases the amount of light from the bulb and reduces the need to turn on more lights.



Safety note: Burned out CFLs, which contain a small amount of mercury, should be disposed of properly. To locate a collection site in your area, or to learn what to do if a CFL breaks, visit **earth911.com**.



Electronics

- Turn off your computer and game consoles when not in use.
- Home electronics are made to turn on and off many times. Always turn them off to save energy.
- Electronics with the ENERGY STAR® label use as much as 60 percent less energy while providing the same performance.
- Beware of phantom loads which continue to draw electricity when they are plugged in but not in use. Examples are telephone chargers, electronic games and television sets.
- Use advanced power strips for household electronics. One button will turn off multiple appliances, which conserves electricity.

Refrigerators and freezers



- When looking to replace your old refrigerator, do so with an ENERGY STAR® model, which requires approximately 40 percent less energy than conventional models and provides energy savings without sacrificing the features you want.
- The coils in the back or bottom of your refrigerator and freezer should be kept as clean as possible.

Dishwashers

- Only run dishwashers when full and use the “air dry” or “no heat dry” settings.
- ENERGY STAR® dishwashers use at least 41 percent less energy than the federal minimum standard for energy consumption.

Laundry

- Buy a moisture-sensitive dryer that automatically shuts off when clothes are dry.
- Use a clothesline whenever possible.

Cooking

- Use a microwave oven, toaster oven or crock pot instead of a conventional oven.
- Use the right-sized pan for the stove top element.
- Cover pans with lids to keep heat from escaping.

Reduce

- Use less.
- Purchase products with little packaging.

Reuse

- Use something again.
- Reuse a box or a grocery bag.

Recycle

- Make something into another new item.
- Participate in the recycling programs in your community.






Parents, be wattsmart and watch the energy savings add up.

An individual with a combined electric and heating fuel bill of \$2,500 per year could save 20 percent or \$42/month by using these and other energy efficiency tips. That is like getting a pay raise without having to work harder or longer.

The cost of lighting your home

Take a walk around your home with your family to learn about your lighting.

1. Count the types of bulbs in each room and record in Table 1; then total each column.
2. Transfer the total for each type of lighting into Column A on Table 2.

Location	Incandescent 	CFL 	LED 
Bedroom 1			
Bedroom 2			
Kitchen			
Dining room			
Living room			
Hallway			
Laundry room			
Family room			
Front porch			
Other			
TOTAL			

3. In Table 2, multiply the numbers in Column A by the given amounts in Column B. Place the answers in Column C.
4. Add the numbers in Column C to get the total approximate cost of electricity for lighting your home.
5. Discover how much money you will save if all the bulbs in your home were CFLs or LEDs. Add the numbers in Column A to get the total number of bulbs in your home. Transfer the total to both rows in Table 3, Column E as indicated by the arrows.
6. Multiply the total number of CFLs by the annual cost of electricity for one CFL provided in Column F and put your answer in Column G.
7. In the last row of Table 3, multiply the total number of LEDs in Column E by the annual cost of electricity for one LED bulb provided in Column F and put your answer in Column G.

	A	B	C
	Number of bulbs from Table 1	Annual cost of electricity for one bulb	Annual cost of electricity for lighting
Incandescent		× \$4.80	
CFL		× \$1.08	
LED		× \$0.60	
TOTAL			

	E	F	G
All CFLs		× \$1.08	
All LEDs		× \$0.60	

How do the amounts in Column G compare with your current total cost for lighting in Column C above?

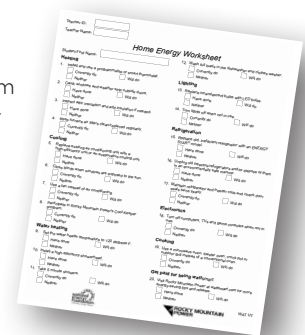
Cost figures are for an individual bulb (60 Watt incandescent), the lumens equivalent CFL (13 Watts) and LED (7 Watts) each used for 2 hours each day for 30 days. EEI Typical Bills and Rates Report, Winter 2016 (12 months ending 2015).

Be **watt**smart – it's up to you

Together with your parent(s), complete the separate *Home Energy Worksheet*. Return it to your classroom teacher and receive your wattsmart nightlight. You may find you are already practicing ways to be energy efficient but there is always room to do more.

Challenge yourself and your family to commit to practice energy efficiency by making wise energy choices and being wattsmart. You will not only help extend the life of our natural resources, but save money, too!

For other energy-saving ideas and incentives, visit **wattsmart.com**. Congratulations to you and your family for making a difference.





Be **watt**smart
Begin at home



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Be **watt**smart
Begin at home

TEACHER GUIDE



Welcome to Be **watt**smart, Begin at home

This program teaches the importance of energy and assists students and their families in saving energy in their homes. For teachers, **Be wattsmart, Begin at home** reinforces important electrical concepts from your curriculum.

This *Teacher Guide* was designed to supplement program instruction. A variety of tools have been provided to allow you to format **Be wattsmart, Begin at home** to meet your instructional needs. These tools include:

- General guidelines and activity suggestions
- Classroom activities to further the impact of lessons
- Additional fun and interesting activities for students
- Activities containing STEM-correlated curriculum for your classroom

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About Rocky Mountain Power

Rocky Mountain Power is committed to the delivery of reliable electric service that's safe, low-cost and increasingly from clean, renewable resources. Serving more than 1 million customers in Utah, Idaho and Wyoming, the company is one of the lowest cost energy producers in the nation.

About the National Energy Foundation

The National Energy Foundation (NEF) is a unique 501(c)(3) nonprofit educational organization dedicated to the development, dissemination and implementation of supplementary educational materials and programs. These resources for education relate primarily to energy, water, natural resources, science, math, technology, conservation, energy efficiency and the environment. NEF recognizes the importance and contribution of natural resources to our economy, to our national security, the environment and our quality of life.

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STEM Correlations

STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering and mathematics. Some of the skills include: problem-solving, innovation, invention, inquiry, logical reasoning, critical thinking, technological literacy, communication tools, research tools, design and modeling, data analysis and probability, collaboration and real world connection. This chart correlates *Teacher Guide* activities to STEM skills and behaviors.

Activity	Science				Technology				Engineering				Math				
	Science as Inquiry	Energy Sources, Forms and Transformations	Science and Technology	Personal and Social Perspectives	Productivity Tools	Communication Tools	Research Tools	Problem-solving and Decision-making Tools	Historical Perspective	Design and Modeling	Invention and Innovation	Test Design and Troubleshooting	Use and Maintain	Numbers and Operations	Measurement	Data Analysis and Probability	Connection to the Real World
Conservation Cookie	X			X										X	X	X	X
Pass the Sack	X	X		X													
Energy Ticket	X	X		X				X						X	X	X	X
The Search for Energy	X	X	X	X										X		X	X
Where Do Fossil Fuels Come From?	X	X	X					X						X	X		
Energy for Electricity	X	X	X	X			X										
Insulation Tests	X	X	X	X			X	X		X	X	X	X	X	X	X	X
How Bright Is Your Light?	X	X	X				X		X					X		X	X
Energy in Math														X		X	X

Section One:

Energy Efficiency

Objective: Identify and explain types of natural resources, conservation and energy efficiency.

Vocabulary:

Natural resource: A material source of wealth, such as timber, fresh water or a mineral deposit that occurs in a natural state and has economic value.

Renewable resource: A natural resource that is capable of being renewed or is replaceable such as energy from the sun or wind.

Nonrenewable resource: A natural resource that is not capable of being renewed, replaced or takes a very long time to replace, such as fossil fuels.

Fossil fuel: A combustible material created naturally beneath the earth's surface over a long period of time from the remains of plants and animals. Examples include coal, natural gas and oil.

Conservation: The protection, preservation, management, or restoration of natural resources such as forests, soil and water.

Energy efficiency: Using less energy to accomplish the same amount of work.

Classroom Activities:

- "Conservation Cookie"
- "Pass the Sack"
- "Energy Tickets"
- "The Search for Energy"

Energy Challenge

Discussion Idea: Embodied energy in a glass of milk.

Objective: Trace the energy and resources needed to make a common product.

Review the steps that it takes to produce a glass of milk and bring it to the consumer.

- Feeding and raising a cow
- Milking a cow
- Packaging
- Refrigeration
- Transportation of milk (dairy to warehouses to store to home)

Discuss with Your Class:

1. What natural resources go into making and transporting a glass of milk?
2. The energy used to make and transport a product is called embodied energy.
3. What embodied energy sources are involved in producing and transporting milk?
4. How can understanding embodied energy in our daily lives encourage us to be energy-efficient?



Conservation Cookie

Objective:

To demonstrate the results of conservation of a resource.

Pre-activity Discussion:

- What is conservation?
- Why is conservation so important?

Materials:

- Two cookies (or other food item) for each person
- One watch or clock with a second hand for timing
- Computer or graph paper to graph results

STEM Connection

Science

- Science as Inquiry
- Personal and Social Perspectives

Math

- Numbers and Operations
- Measurement
- Data Analysis and Probability
- Connection to the Real World

Procedure:

1. Tell students that this is the first of two rounds. In each round, they will be eating a cookie, which represents our natural resources. They are to stand at their desk and you say to eat the cookie as they normally would, then when the cookie has been completely swallowed, sit down. The activity will work better if you ask students NOT to put the entire cookie in their mouth at one time, to take at least two bites!
2. Give each student a cookie, with instructions not to eat it until you say. Start the watch and tell the students to eat the cookie as they would normally eat it. At 30 second intervals, count the number of students standing and record this data.
3. Individually or as a class, graph this data using a line graph.
4. Tell students they will now practice conservation with a second cookie. To represent conservation, students will only take a bite from their cookie when you say "BITE." Just as before, they will stand, take bites the same size they took last time, and sit after the entire cookie has been swallowed.
5. Pass out a second cookie to each student.
6. Start the watch and have everyone take a "BITE" and then wait 30 seconds. Record the number of students standing and again say "BITE." Repeat this procedure until almost everyone has finished his or her second cookie.
7. On the same graph used for the first cookie, add a second line graph for the conservation cookie.



Discussion:

- Compare the two graphs. If desired, have students calculate the slope of each graph from 0 to 30 seconds and from 30 seconds to 1 minute. How do the slopes vary over time and between graphs? What does a change in slope represent?
- Discuss the term conservation and its effects on our natural resources. Can we control how rapidly we use water or energy by conserving it? Water and energy are some of the most important things we use in our lives. If they are used up quickly, and all at once, we will not have enough left for the future.

Pass the Sack

Objective:

To demonstrate the difference between renewable and nonrenewable resources and the need for conservation of resources.

Materials:

- Two different kinds of candy or other objects students find desirable
- Sack to hold candy, such as a gallon size plastic bag

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Personal and Social Perspectives

Procedure:

1. Count out enough candy so that there is one piece per student (some of each type of candy – perhaps less of one so it will run out faster). Put it in the sack or bag. Save the remaining candy. If you have a very polite class, count enough candy for half of the class. You want the candy to run out before everyone gets some!
2. Tell students you will be demonstrating how resources get used over time by playing “Pass the Sack.” Show students the sack and tell them when they get the sack, they should take some energy and pass the sack to the person next to them.
3. Before passing the sack to the first student, review renewable and nonrenewable resources. Have students give examples of each as you hand the sack to a student.
4. While this discussion is taking place, allow students to pass around the bag of candy without any rules about how many pieces students may take. Occasionally, add four or five pieces of one of the types of candy you are using. (This will be your renewable resource.) The sack will be empty before it reaches all the students.
5. Ask students that did not get any candy how they might obtain energy from other students. What if each student represented a country? How do countries obtain resources? Trade? Barter (trade for goods)? Buy (trade for currency)? Invade and take (go to war)? What effect did the availability of candy have on relationships between students? What effect might the availability of natural resources have on the relationship among nations, provinces, states, people, standards of living and quality of life?
6. Explain how our resources are like the candy. Which type was nonrenewable? How could you tell? (No more was added to the bag once it was being passed around.) Which type was renewable? How could you tell? (It was added to the bag periodically.)
7. Point out that resources have limits just like the candy. Emphasize that many resources, such as fossil fuels, are nonrenewable and are being consumed faster than they are being replaced by nature. Discuss the fact that it would be more difficult for students to eat the candy if they had to search the room to find it instead of just taking it from the sack. Energy companies must seek resource deposits and obtain rights to drill or mine for them; they do not just magically appear. Point out that natural gas, coal and oil companies are looking harder for more resources as supplies dwindle.
8. Now plan to pass out the remaining candy. Should rules be established? Do oil, coal and natural gas companies have rules (regulations) that they must follow to find resources? Should there be rules and regulations on how much oil, coal and natural gas people use? How would students get resources if they could not leave their desks? How do the students' social decisions influence the availability of candy?

Energy Tickets

Objective:

See how energy decisions affect our standard of living and our quality of life. This will help students realize how important it is to use energy efficiently.

Materials Needed:

- Energy Tickets – 25 per student
- Box to collect tickets (toll box)

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Personal and Social Perspectives

Technology

- Problem-solving and Decision-making Tools

Math

- Numbers and Operations
- Measurement
- Data Analysis and Probability
- Connection to the Real World

Procedure:

1. Before class begins, copy a page of tickets from the master on page 7 for each student. Alternatively, you may use preprinted tickets available from retail stores.
2. Introduce the game to the students by listing several places the students use energy in the school, for example, in the classroom: lights, computers and heaters.
3. Provide each student with 25 Energy Tickets, and instruct them to write their name on all of their Energy Tickets.
4. Every time a student uses energy, have them write how the Energy Ticket was used on the back and put the ticket in the toll box. If they use heated water, it will cost two tickets, because they are using both energy and water. It also costs two tickets if they waste energy unnecessarily. For example, leaving lights or a computer on when not in use wastes energy.

5. Keep a record of how many tickets the students have left each day.

6. Optional: look at how the tickets were used and create a graph of tickets used for different categories (sharpening pencils or using computers, for example) out of the tickets deposited in the box.

Discussion:

- What would happen if there was a real energy shortage in the community and families were issued a certain number of Energy Tickets?
- What if after they used them, all of their electricity and gas were shut off?
- What would they do to adjust their use of energy?
- What are other alternate sources of energy?

Language Arts Connection:

- Quick write – Describe one thing you could do to reduce your personal energy usage.
- Creative writing – Write a story about life after our nonrenewable energy sources are gone.

ENERGY TICKET
This ticket allows
one energy use.

_____ student name

ENERGY TICKET
This ticket allows
one energy use.

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ENERGY TICKET
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ENERGY TICKET
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one energy use.

_____ student name

The Search for Energy

Objective:

To learn the difference between renewable and nonrenewable resources.

Materials Needed:

- About 1/4 cup seed beads (solar energy)
- Colored beads in the following proportions: 84 percent black beads (about 250 beads) for coal; 16 percent red (about 50 beads) for uranium; 2 percent white (about 7 beads) for natural gas; 1 percent blue (about 4 beads) for oil. These proportions approximately reflect the nonrenewable energy reserves in the U.S.
- Optional: large bed sheet or tarp to place beads on for easy cleanup

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology
- Personal and Social Perspectives

Math

- Numbers and Operations
- Data Analysis and Probability
- Connection to the Real World

Procedure:

1. Divide the class into five equal groups. Each group will be a company going after a particular resource. The beads represent reserves of the various energy resources. Have students gather in a large circle around the sheet or other area where you will place the beads.
2. Scatter the large beads plus a spoonful of “solar” beads on the sheet so they are well spread out. Explain that this exercise shows how the amount of available resources changes over time. You may want to designate certain places as protected areas, where the resources are off limits to protect the environment.
3. Tell students you will do several trials and look to see how the types of available resources change after each trial. Tell each group that they will have 30 seconds to pick up as many beads possible of their color; then you will stop and look at how things are changing. It is NOT a race! After checking for understanding, start timing.

4. After 30 seconds, have the groups stop and count the beads they have gathered. Record the results in a data table. If some groups have collected all of their available resource, point out that the resource is now depleted and they are unemployed. You can allow the students to join another group. Collect the beads students picked up in the first trial.
5. Scatter another spoonful of solar energy, helping students realize that since solar is a renewable resource, there is the same amount of it each time you look, whereas the fossil fuels are being depleted. Repeat the search period so students can get more beads.
6. Stop after 30 seconds and have the group count and record the beads collected again. Note that there are fewer fossil fuels found in the second round. Students have to look harder to find what is left. The solar count is slowly but surely catching up with the fossil fuels. Repeat with additional trials as needed.
7. Create a multi-line graph of the number of beads collected each trial. This can be done by individual students or as a class. Note that the nonrenewable resources decrease until they are depleted but the solar increases steadily.

Discussion:

- Why does the solar line differ from the others? Why does it go up rather than down?
- How do improvements in technology affect the extraction of resources from the earth?
- How do improvements in technology affect our usage of renewable resources?
- In the real world, can we extract ALL of one resource? Why do some deposits go unused?

Section Two:

Resources You Can Use Efficiently

Objective:

To discuss and identify various resources students use every day.

Vocabulary:

Electricity: The flow of electric charge used as power.

Green energy: Electricity produced by renewable energy sources that are nonpolluting, or that pollute very little.

Natural gas: A fossil fuel that is a mixture of gases occurring in underground deposits.

Classroom Activities:

- “Where Do Fossil Fuels Come From?”
- “Energy for Electricity”
- “Electrical Generation Poster”

Energy Challenge

Discussion Idea:

What natural resources can you save by recycling?

Optional Activity:

1. Have students keep track of each paper product that they use during one day with tally marks.
2. Compare amounts of paper used by students in the class. Ask students if they were surprised by the amount of paper they used.
3. Based on their usage of paper in one day, have students estimate how much paper they would use in a week, a month and a year.
4. Discuss the difference between reducing, reusing and recycling.
 - Reduce – using less of something
 - Reuse – using something again
 - Recycle – making something into another new item
5. Brainstorm several ways that paper use can be reduced, that paper can be reused and how paper can be recycled in your community.

6. Tell students that recycling 1 ton of paper saves the energy equivalent of 1,024 gallons of gasoline. Recycling just four aluminum cans save enough energy to power a laptop for almost 21 hours.
(EPA, 2017)



Where Do Fossil Fuels Come From?

Objective:

This activity investigates the production of natural gas and oil from ancient life. This activity models this process.

Materials per Student Group:

- A clear container to represent the ocean
- Sand or dirt
- Baking soda “plankton”
- Vinegar (20 percent) and water (80 percent) “ocean” mixture
- Cup or scoop
- Safety goggles

NOTE: You may do this as a demonstration, or have students do it in small groups.

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology

Technology

- Problem-solving and Decision-making Tools

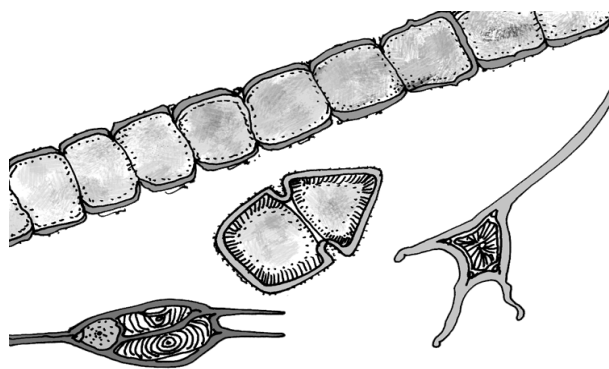
Math

- Numbers and Operations
- Measurement

Procedure:

1. Explain to students that you will be showing them a model of how oil and natural gas form in the ocean. A very similar process takes place on land with plants to form coal.
2. Have students wear safety goggles to avoid splashing vinegar water in their eyes. It is harmless but uncomfortable.
3. Have students sprinkle a small amount of sand to cover the bottom of the container. The ocean floor is covered with sediments and the sand represents these sediments.
4. Next, have students sprinkle “plankton” over the sand, liberally covering the bottom of the container. This represents plankton (microscopic life plant and animal-like creatures called protists) that have died and settled to the bottom of the ocean.

5. Explain that over time, sediments are deposited on the ocean floor. Students should completely cover the plankton with sand. (You can gently push the sand around with your hands to simulate the pressure and weight the overlaying sediments have on the plankton.)
6. The ocean has water in it, so pour some of the vinegar/water (“ocean” mixture) into the container. Bubbles and foam begin to appear. You can see the bubbles bursting and can hear the gas being released to the air. Point out that this is a sign of a chemical change.



Discussion:

- Discuss with students that natural gas in the ocean is produced much in the same way as you have modeled, but that the process takes MANY years. In the ocean the plankton is buried under miles and miles of sediments which caused the weight of those sediments to “cook” the plankton under high temperature and pressure. The heat and pressure changes the plankton into oil and natural gas. Natural gas floats on top of the oil produced.
- Discuss how this model is different from real life. The gas produced in the experiment is carbon dioxide rather than natural gas, and since our container is open, the gas escapes into the air. In the ocean, there are usually impermeable layers that keep natural gas and oil trapped beneath the surface until we drill down and release it.

Energy for Electricity

Objective:

Trace the flow of energy from a natural resource to electricity in our homes.

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology
- Personal and Social Perspectives

Technology

- Research Tools

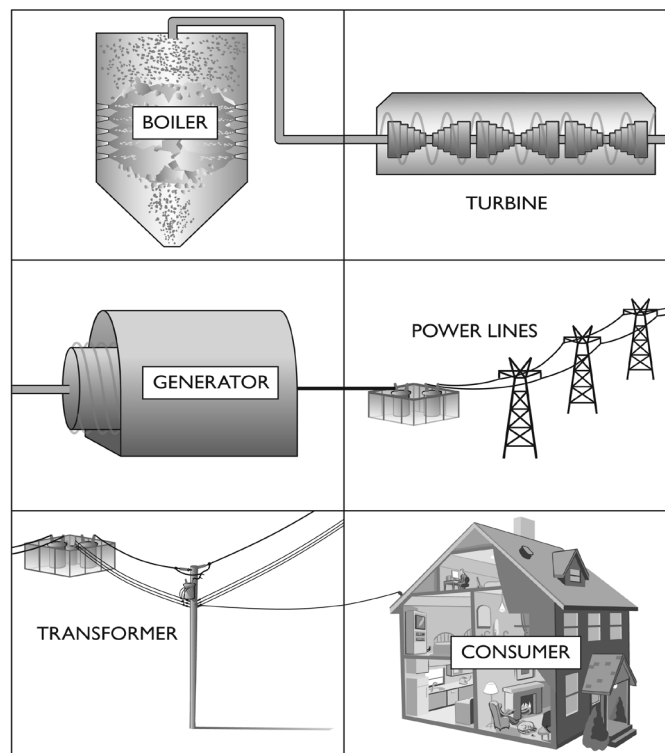
Procedure:

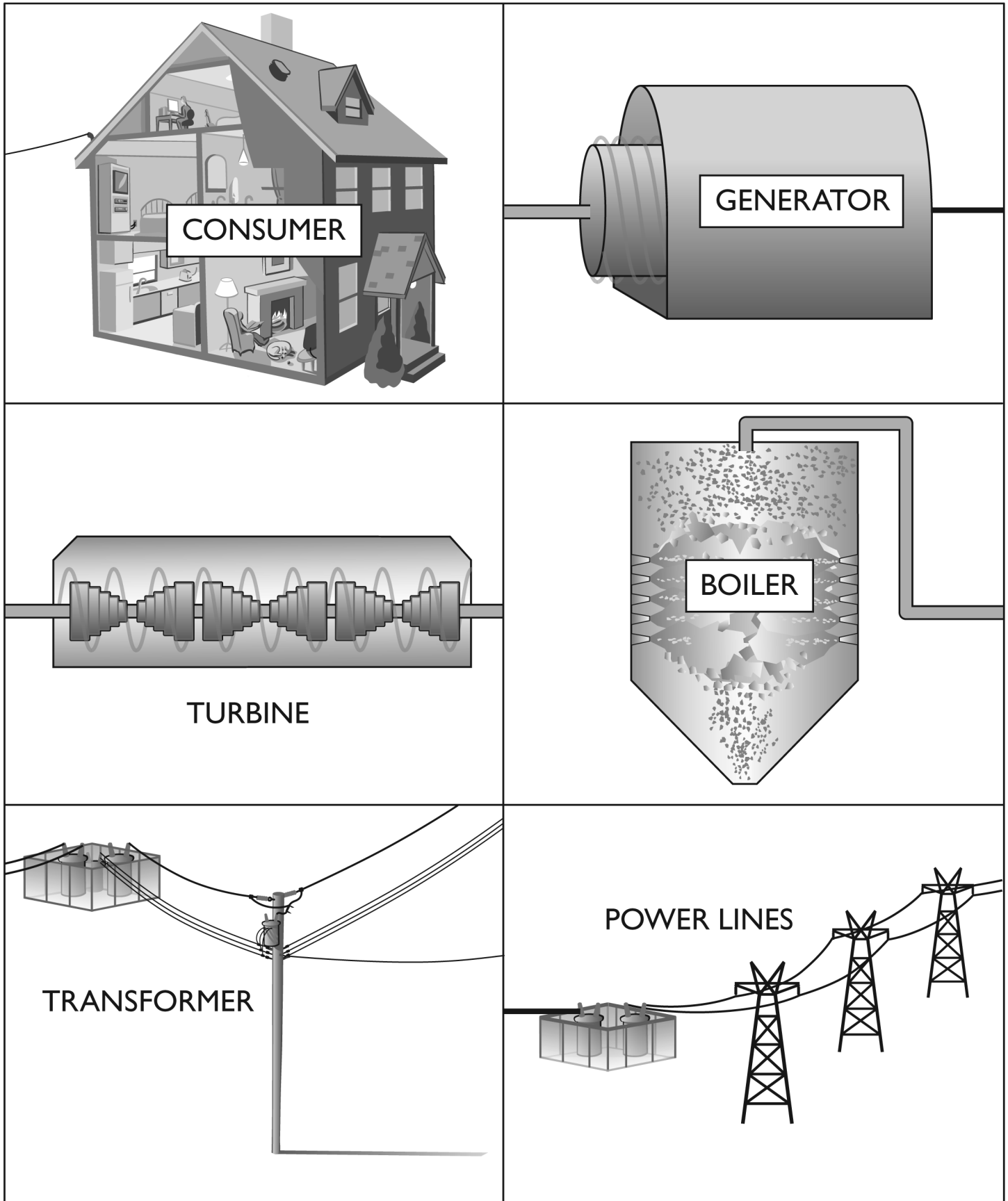
1. Ask students how their lives would be different without electricity. Where does electricity come from?
2. Pass out a copy of the “Electrical Generation Puzzle” found on the following page. Have students cut each part of the puzzle (transformer, turbine, generator, boiler, power lines and consumer) into separate pieces. Then, have them take

a few minutes to put the puzzle pieces in order from the first to the last step of the process of electrical generation.

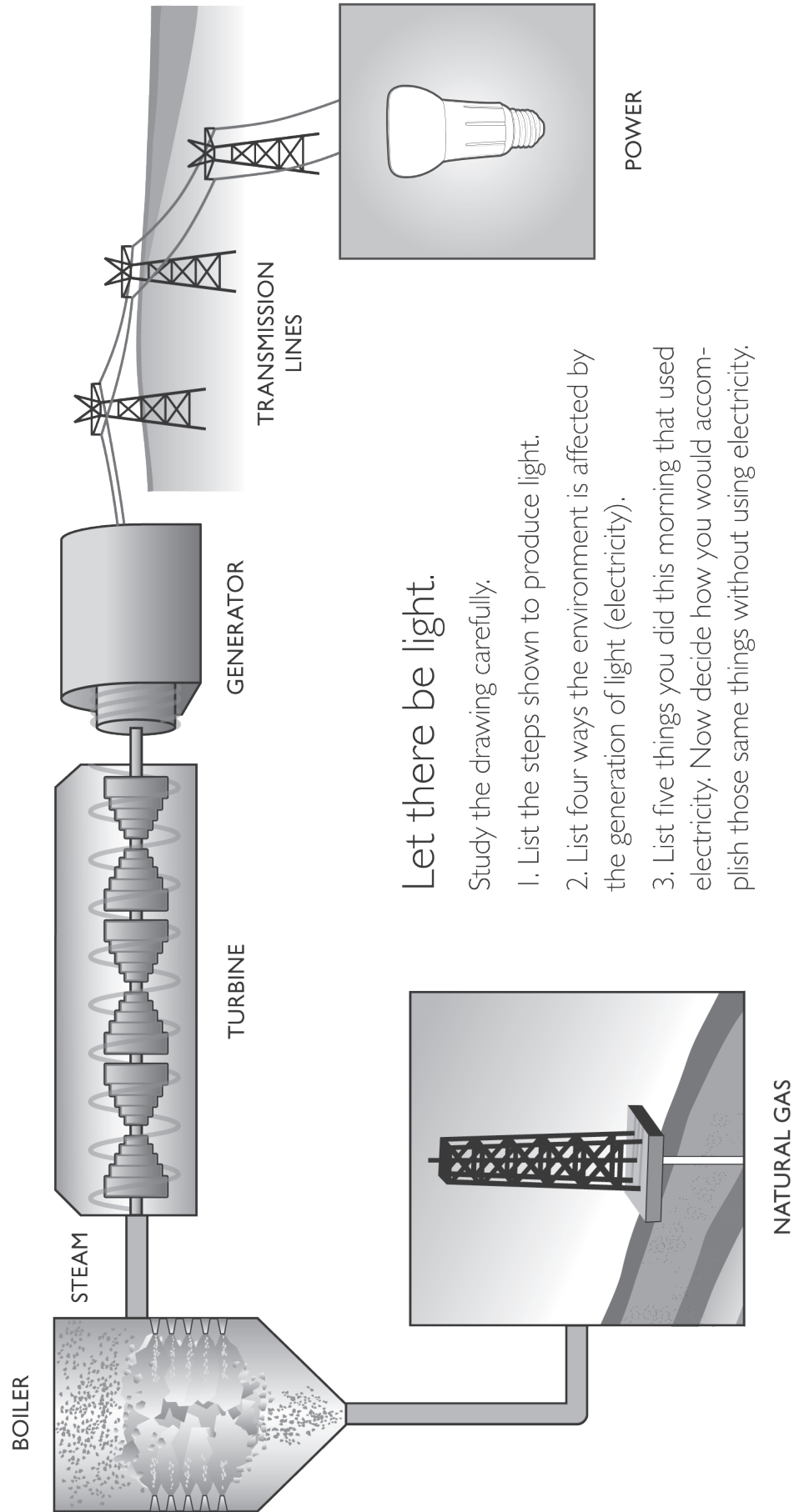
3. Go through each puzzle piece, explaining the process of each step:
 - Boiler – converts chemical energy from fuel (fossil fuels, biomass, hydrogen) to thermal energy, changing water to steam
 - Turbine – turned by steam, converting thermal energy to mechanical energy
 - Generator – turned by turbine, rotating coil of wire in a magnetic field, converts mechanical energy to electrical energy
 - Power lines – transmit electrical energy at several thousand Volts
 - Transformer – step-up transformers along the power lines increase voltage periodically; step-down transformers on poles or in yards reduce the voltage to a safe level for use
 - Consumer – converts electrical energy into many forms to run lighting and appliances

Completed puzzle for teacher reference





Electrical Generation



Let there be light.

Study the drawing carefully.

1. List the steps shown to produce light.
2. List four ways the environment is affected by the generation of light (electricity).
3. List five things you did this morning that used electricity. Now decide how you would accomplish those same things without using electricity.

Section Three:

Be **watt**smart, Begin at home

Objective:

To apply the principles of energy efficiency at home by changing habits.

Vocabulary:

Shell: The floors, windows, doors, walls and roof of a building that form a barrier between the indoor and outdoor environment.

Convection: Heat transfer in a gas or liquid by currents that circulate from one region to another. Convection works because heated fluids or gases expand, and since they are less dense, rise through the cooler materials around them.

Conduction: Heat transfer in a solid or liquid without any motion or flow of matter in the material. Heat is transferred by the motion of molecules and electrons. Higher speed particles from the warmer areas collide with slower ones from the cooler areas, causing a transfer of energy to the slower particles.

Radiation: Heat transfer between objects via electromagnetic waves. Photons traveling at the speed of light transfer the heat energy, so the objects do not have to be in contact with each other for heat to be transferred. Radiation can travel through space.

Insulation: A barrier that minimizes the transfer of heat energy from one material to another by reducing the effects of conduction, convection and/or radiation.

Classroom Activities:

- "Insulation Tests"
- "How Bright Is Your Light?"
- "Energy in Math"
- "Be wattsmart, Begin at home Poster"

Energy Challenge

Discussion:

- What changes does your school need to make to save energy?

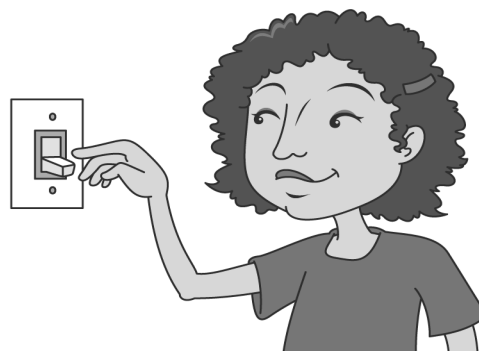
Optional Activity:

- Have students tour the school building to fill out the following checklist:

	Yes	No
1. Are outside doors weather stripped?	_____	_____
2. Are windows caulked to prevent air leaks?	_____	_____
3. Are lights turned off when no one needs them?	_____	_____
4. Is electrical equipment turned off when not in use?	_____	_____
5. Are faucets in bathrooms and kitchen areas free of leaks?	_____	_____

Discussion Idea:

- In which of the five areas does your school need the most improvement? How could students assist in making a change?



Insulation Tests

Objective:

To demonstrate the different types of materials that can be used for insulation.

Materials:

- Thermometer
- Graduated cylinder or measuring cup
- Large jug of water
- Large board or tray
- Baby food jars with lids (one for each material being tested)
- Insulation materials to test: gloves, socks of different materials, other types of clothing, plastic foam, paper, aluminum foil, leaves, etc.

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology
- Personal and Social Perspectives

Technology

- Research Tools
- Problem-solving and Decision-making Tools

Engineering

- Design and Modeling
- Invention and Innovation
- Test Design and Troubleshooting
- Use and Maintain

Math

- Numbers and Operations
- Measurement
- Data Analysis and Probability
- Connection to the Real World

Procedure:

1. On a piece of paper, list all of the materials being tested.
2. Using the jug of water, fill each jar with 120 mL (1/2 cup) of water.
3. Measure the temperature of the water in each jar to make sure they are the same, then put on the lids.
4. Wrap all but one of the jars with the materials being tested. Label the unwrapped jar "control."
5. Place each jar on the large board or tray.
6. Carry the board or tray outside and leave it there.
7. Create a data table to record the beginning and ending temperature of the water in each jar.
8. After a predetermined amount of time has passed, measure the new temperature of each jar and record the ending temperatures in the data table.
9. Calculate the change in temperature for each jar and add it to the data table. Graph the temperature change for each jar in a bar graph.

Discussion:

- What materials made the best/worst insulators?
- Could you use these to keep your home warm in the winter or cool in the summer?
- What materials are used in homes for insulation? (fiberglass, blown-in insulation, polyurethane foam, etc.)
- What do good insulating materials have in common? How does insulation work? (They have large pore spaces that block conduction of heat through surfaces.)

Language Arts Connection:

Quick write – Based on the information in your data table, give recommendations for insulating a tree house.

How Bright Is Your Light?

Objective:

To demonstrate which lighting sources are the most energy efficient.

Materials:

- Various light bulbs (incandescent, CFL and LED)
- Lamp or light socket
- Thermometer

STEM Connection

Science

- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology

Technology

- Research Tools

Engineering

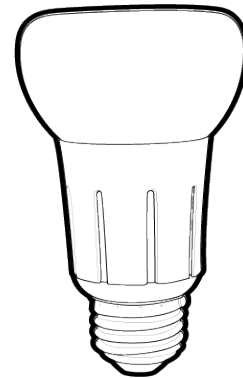
- Historical Perspective

Math

- Numbers and Operations
- Data Analysis and Probability
- Connection to the Real World

Procedure:

1. Ask students what electrical item is used most often in any building and can also account for a lot of wasted energy (lights).
2. Put each light bulb in the lamp and leave it on for five minutes. Hold a thermometer at a distance from, not touching, the bulbs. Record the temperatures. Which bulb produces the most heat?



3. Not all light sources are created equal. Some are much more energy efficient than others. The least efficient light bulbs are incandescents. These bulbs were invented by Thomas Edison and have changed very little in the last 100 years. Incandescent bulbs get very hot when they are turned on because about 90 percent of the energy that goes into an incandescent bulb is given off as heat instead of light.

By contrast, the compact fluorescent light, or CFL, uses 75 percent less energy because it gives off less heat. A CFL can last up to 10 times longer. LED bulbs are even more efficient, using 75 – 80 percent less energy than traditional incandescent bulbs and can last as much as 25 times longer.

Discussion:

- Does your family use energy-efficient CFLs or LEDs? How can heat from an incandescent bulb cause further energy waste during the summer?

Energy in Math

STEM Connection

Math

- Numbers and Operations
- Data Analysis and Probability
- Connection to the Real World

1. Jessie saved more energy than Michael. Michael saved more energy than Maggie. Maggie saved less energy than Jessie. Karen saved more energy than Jessie. List the kids' names in order of how much energy they saved, least to most:

- ☐ Jessie, Karen, Maggie, Michael
- ☐ Maggie, Michael, Jessie, Karen
- ☐ Michael, Jessie, Maggie, Karen
- ☐ Maggie, Karen, Michael, Jessie

2. The Maher family used 57,000 gallons of water a year, costing them \$525 to heat it. Estimate how much money they would save in a year if they cut their hot water use by 30,820 gallons.

- ☐ \$100
- ☐ \$240
- ☐ \$284
- ☐ \$525

3. If each person in a house uses a 60 Watt bulb in their bedroom 4 hours a day, and there are three people living there, how many Watts will be used a day to light their room?

- ☐ 20 Watts
- ☐ 240 Watts
- ☐ 650 Watts
- ☐ 720 Watts

4. For every 10 degrees the water heater setting is turned down, you can save 6 percent of the energy used. If Charles turns his water heater down by 15 degrees, about what percent savings in energy will he save?

- ☐ 6%
- ☐ 9%
- ☐ 12%
- ☐ 15%

Energy in Math - Answer key

1. Jessie saved more energy than Michael. Michael saved more energy than Maggie. Maggie saved less energy than Jessie. Karen saved more energy than Jessie. List the kids' names in order of how much energy they saved, least to most:

☐ Jessie, Karen, Maggie, Michael
☒ Maggie, Michael, Jessie, Karen
☐ Michael, Jessie, Maggie, Karen
☐ Maggie, Karen, Michael, Jessie

2. The Maher family used 57,000 gallons of water a year, costing them \$525 to heat it. Estimate how much money they would save in a year if they cut their hot water use by 30,820 gallons.

☐ \$100
☐ \$240
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☐ \$525

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☐ 6%
☒ 9%
☐ 12%
☐ 15%

Be **watt**smart, Begin at home Poster

Materials:

- House poster found on the following page
- Colored markers or pens

Instructions:

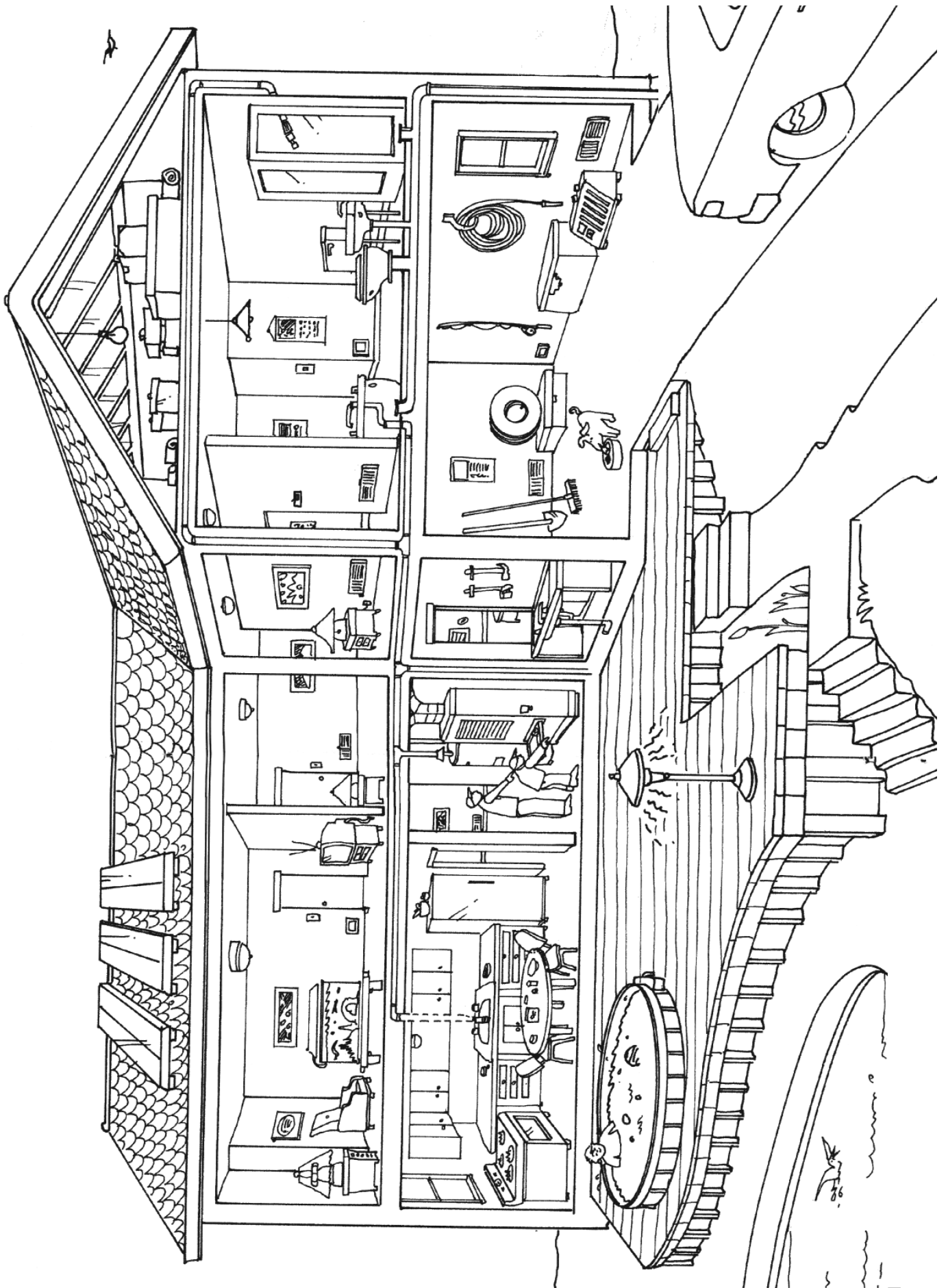
- Add or color the items below. You may want to do different items each day as you cover different topics: electricity, natural gas, water, etc.
- Add a bicycle.
- Add some recycling bins in the garage.
- Add some trees to shade the house.
- Add a ceiling or floor fan to the home for cooling.
- Put a blue star (for ENERGY STAR® products) on the refrigerator, television and furnace.
- Color the energy-efficient shower head.
- Color all items that use electricity, yellow.
- Color the thermostat brown.
- Color the furnace filter that is being changed orange.
- Draw a purple water drop next to all items in the house that use water.

Language Arts Connection:

Quick write – Write a brief description of the things your family has done to improve the energy efficiency of your home. Add items that you will encourage your family to do in the future.

Social Studies Connection:

- Choose one natural resource used for energy and create a T-chart or Venn diagram comparing the positive and negative effects of the use of this resource on the physical environment.
- The more efficient your home is, the smaller your carbon footprint. Your carbon footprint is the total amount of carbon dioxide (CO₂) and other greenhouse gases you generate annually. The lower your footprint, the better!





Be **watt**smart
Begin at home

Lingo Card

L	I	N	G	O
Water Heater	Natural Gas	Natural Resource	Incandescent	Reduce
Reuse	Phantom Load	Oil	Coal	ENERGY STAR®
Renewable	Energy	Be watt smart Begin at home	Turn It Off!	Uranium
Energy Efficiency	LED	Recycle	68 Degrees	Embodied Energy
Cooking	78 Degrees	Solar	Programmable or Smart Thermostat	Electricity

<http://print-bingo.com>

L	I	N	G	O
Reuse	Natural Gas	Phantom Load	LED	78 Degrees
Cooking	Electricity	Renewable	Recycle	68 Degrees
Natural Resource	Water Heater	Be watt smart Begin at home	ENERGY STAR®	Nonrenewable
Embodied Energy	Coal	Energy Efficiency	Heating	Incandescent
Programmable or Smart Thermostat	Reduce	Oil	Solar	Uranium

<http://print-bingo.com>

L	I	N	G	O
Coal	Natural Gas	Solar	Turn It Off!	Renewable
Water Heater	Nonrenewable	Phantom Load	Electricity	Reuse
Energy	Oil	Be watt smart Begin at home	68 Degrees	Cooking
Programmable or Smart Thermostat	Incandescent	Recycle	Uranium	Natural Resource
Reduce	78 Degrees	Embodied Energy	LED	Energy Efficiency

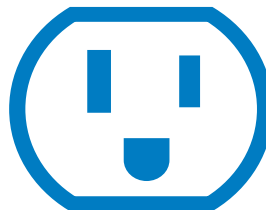
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L	I	N	G	O
Natural Resource	Water Heater	Natural Gas	Programmable or Smart Thermostat	78 Degrees
Turn It Off!	Reduce	Oil	Embodied Energy	Cooking
Phantom Load	ENERGY STAR®	Be watt smart Begin at home	Uranium	Recycle
Energy	LED	68 Degrees	Energy Efficiency	Heating
Electricity	Renewable	Incandescent	Reuse	Solar

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Be wattsmart, Begin at home		Science (NextGen)		Math (common core)	Language Arts (common core)	
		PS3-4 Energy	ESS3-4 Earth and Human Activity	Number & Operations in Base Ten	Reading	Writing
Idaho 4 th Grade Correlations		Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat and electric currents.	Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Operations with multi-digit whole number & with decimals to hundredths	Reading for information, Speaking and Listening	Writing for effective communication
Teacher Guide Activities	Activities					
	Energy Challenge - Embodied Energy		ESS3-4-1, ESS3-4-2, ESS3.A		SL.4.1	
	Conservation Cookie		ESS3-4-1, ESS3-4-2, ESS3.A	4.OA.A.1, 4.MD.A.2	SL.4.1	
	Pass the Sack		ESS3-4-1, ESS3-4-2, ESS3.A		SL.4.1	
	Energy Ticket		ESS3-4-1, ESS3-4-2, ESS3.A		SL.4.1	W.4.3
	The Search for Energy		ESS3-4-1, ESS3-4-2, ESS3.A	4.OA.A.1, 4.NBT.B.4-5, 4.MD.A.2	SL.4.1	
	Energy Challenge- Recycling		ESS3-4-2, ESS3.A		SL.4.1	
	Where do Fossil Fuels Come From?		ESS3-4-1		SL.4.1	
	Energy for Electricity	PS3-4-1, PS3-4-2, PS3.D			SL.4.1	W.4.3
	Energy Challenge- Energy Efficient	PS3-4-2		4.MD.A.2	SL.4.1	
	Insulation Tests	PS3-4-2, PS3.D		4.OA.A.1, 4.MD.A.2	SL.4.1	W.4.3
	How Bright is Your Light?	PS3-4-2, PS3.D	ESS3-4-2	4.MD.A.2	SL.4.1	
	Energy in Math		ESS3-4-2	4.OA.A.3, 4.NBT.B.4-5		
	Be watt smart, home poster		ESS3-4-2		SL.4.1	W.4.3
Student Activities	Presentation Information		ESS3-4-1, ESS3-4-2, ESS3.A		RI.4.6	
	Student Booklet		ESS3-4-1, ESS3-4-2, ESS3.A	4.NBT.B.5	RI.4.6	
Posters	<i>Energy Efficiency in Action Poster</i>		4ESS2-2, 4ESS3-1, 4ESS3-2		RI.4.2 RI.4.4 RI.4.6	W.1.8
	<i>Electricity Serves our Community Poster</i>	PS3-4-2	4ESS2-2		RI.4.6	W.1.8

Be **watt**smart Begin at home



Dear Parent(s),

Today your child participated in the **Be wattsmart, Begin at home** program sponsored by Rocky Mountain Power. In this engaging presentation, your child learned key concepts of his or her science curriculum as well as important ways to be more efficient with energy use at home.

As part of the **Be wattsmart, Begin at home** program, your child received a:

- **Be wattsmart, Begin at home** booklet
- *Home Energy Worksheet*
- *Wattsmart Starter Kit Flier*

Please take a moment to read through this informative booklet with your child. Then, fill out the *Home Energy Worksheet* and return it to your child's teacher. To thank you, Rocky Mountain Power will provide your child with a wattsmart nightlight.

We appreciate your efforts to reinforce important **Be wattsmart, Begin at home** energy knowledge and efficiency actions in your home!



wattsmart.com

Teacher Evaluation

Program Evaluation

Be **wattsmart**
Begin at home

Teacher Name:

School:

Sponsor: Rocky Mountain Power



In an effort to improve our program, we would like your assessment of Be wattsmart, Begin at home. Please take a few minutes to fill out this evaluation form. Upon completion, please return the form in the postage-paid envelope along with the student *Home Energy Worksheets* you collected and the sponsor *Thanks a "Watt!" Card*.

Please mark the box that best describes your opinion.

	Strongly Agree	Agree	Disagree	Strongly Disagree
The materials were attractive and easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The materials and activities were well-received by students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The materials were clearly written and well-organized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Students indicated that their parents supported the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presenters were able to keep students engaged and attentive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you had the opportunity would you conduct this program again?

☐ Yes

☐ No

Would you recommend this program to other colleagues?

☐ Yes

☐ No

In my opinion, the thing students liked best about the materials/program was:

One thing I would change would be:

WAT ID



wattsmart Rocky Mountain Power Idaho program

Program Evaluation Summary

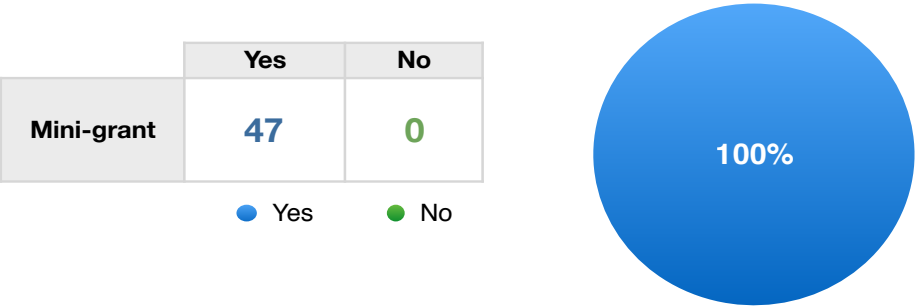
Educators’ impressions of the program from 47 educators.

	Strongly Agree	Agree	Disagree	Strongly Disagree		
Materials were attractive and easy to use	33	14	0	0	70%	30%
Materials/ activities were well received by students	32	15	0	0	68%	32%
Materials were clearly written and well organized	34	12	1	0	72%	26%
Students indicated that their parents supported the program	17	27	1	2	36%	57%
Presenters were able to keep the students engaged and attentive	28	17	2	0	60%	36%

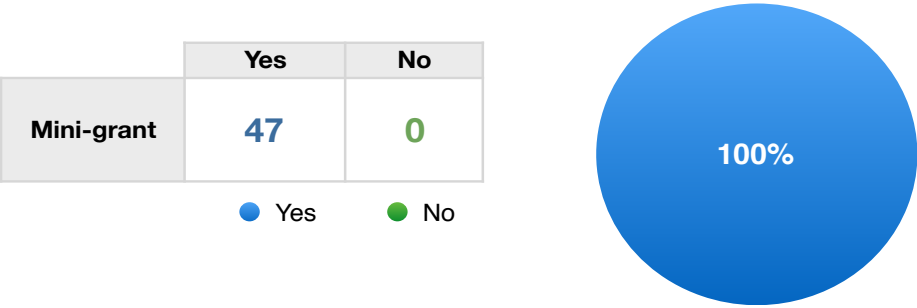
wattsmart **Rocky Mountain Power Idaho program**

Program Evaluation Summary

If you had the opportunity, would you conduct this program again?



Would you recommend this program to other colleagues?



In my opinion, the thing the students liked best about the materials/program was:

All things interactive.
Closed circuit with students.
Energy circle you guys made showing our bodies are conductors.
Hand on activities and demonstrations. Powerpoint was nice too. Great, easy to use program. Thanks
How engaging the presentation was. The Lingo game combined with the little videos, the students were very engaged.
I think they really enjoyed presentation. It was well paced and held their attention throughout.
Lingo and the hands on activities where a few from each class participated. they liked the booklet because they recognized the pictures and information from the slides.
LINGO and volunteers to go up when asked and night light.
My students enjoyed paying Lingo.
Program was very interactive and got kids involved in learning about each concept. As teachers, we didn't have to worry at all about making sure that students were quiet and respectful during the program because the presenters made it so interesting for them, all while they were learning!
Seeing the energy go through students to light up the device. Nightlights are cute to go home with the students. They liked learning about a phantom load.
Students enjoyed the visual aids and hands on activities.
The demonstrations - they were totally engaged for those.
The demonstrations were excellent! Very hands on and so fun for the students. They loved the night lights - Thank you!
The different experiments that showed them how electricity works.
The electrical current demonstration with the circle of students.
The example/activity where students formed a circle and conducted current through their bodies.
The hands on activities were great.
The hands on activities, especially the insulator/conductor activity was the most engaging.
The hands on activity to show energy moving through all of them.
The interaction opportunities and real-world applications.
The interaction they had with the presenters. They did a super job of keeping the students engaged!
The interaction with presenters and the various activities they did. along with the Lingo cards.
The involvement of the students, night light, LINGO, and activities throughout the lesson. We reviewed in the afternoon and the students remembered well what they had learned and experienced.
The night lights
The parts were they got to get up and participate.
The presenters used a variety of activities to engage the students in presenting the concepts. We, as a class, used the many of the activities for the Teacher Guide. The students enjoyed them and learned through the great activities.
The program was well produced and kept the students interest. It was interesting and the students could relate. We would like to continue with this program next year. Thank you!
The slideshow was well presented with great pictures. Making the open/closed circuit activity. Playing LINGO. The presenters. Receiving the awesome nightlight.
The students enjoyed participating in the presentation. The students looked forward to using their night lights.
The students liked the video and the BINGO game, it kept them focused.
The students really enjoyed being involved in or watching the circuit and conduit demonstration
They found the conductor experiment interesting.
They liked the Lingo and especially liked seeing the conduction of electricity through their friends.
They liked the Lingo game. They also liked the demonstration on insulators vs conductors.
They loved how interactive it was.
They loved learning about the insulators and conductors. They also loved the Lingo game.
They loved the electricity demonstration and the rhyme to remember to turn the lights off.
They loved the few times they got to participate. They loved the lights they received after returning the survey.
They loved the night lights, and it was good for them to learn about energy, etc. They enjoyed the matching game.
They seemed engaged through the entire program. There wasn't one specific aspect that stood out, it was very well presented.
Visual, kinesthetic representation of concepts such as "Natural gas to electricity."
Was when the electricity was conducted by touching fingers. The students are still talking about it.
When they got to interact with the battery and learn about circuits travel through conductors.
When they got to participate in the presentation. They really loved creating a human circuit.
When they were actively able to participate in the understanding of how electricity is conducted.

In the future, one thing I would change would be:

After sitting for that long, maybe don't ask for questions at the end. They have a hard time remembering the difference between asking a question and telling a story. Would smaller groups be feasible, in individual classrooms?

Be sure to explain how geo-thermal energy can be renewable if used in such a way to recharge aquafer. Example, some geo-thermal energy fields have been depleted in Nevada.

Doing all 3 classes together made it a bit of a challenge, so doing each class separate would be nice.

Explain the electricity jargon a little better. There were words the students did not understand.

Giving the students more chances to participate and move around.

Have more engaging activities less powerpoint. It was an excellent presentation though!

I would love for them to come back and give another lesson.

It might be more effective if we met in smaller groups like maybe two classes at a time.

It was great!

It was great!

It was great!

It was long with a lot of information. I don't know how much the students retained.

It would be nice if the groups could be smaller, but that can't be helped.

Maybe add another class of students next time, like 4th - 5th?! :)

Maybe smaller groups. We had 150+ students in our session.

more participating, less sitting.

Not one thing! It was great and time well spent!

Nothing

Nothing - it was great!

Nothing!

Nothing.

One or two more activities.

Present to smaller groups so more can be involved and to keep the noise level down.

Slow down

Smaller groups

Smaller groups for more interaction.

Students were disappointed in the brightness and efficiency of the night lights.

The more "volunteer" students you can use, the more engaging it can become. I really liked how you used so many.

The presenters need to remember they are working with children and it may be beneficial to have ALL students moving every 10-15 minutes.

The presenters told the students to hold on to any questions until the end and mentioned they had a message to share and students' story time is not part of the presentation until after the presentation. The presenters did a wonderful job of staying positive with the students.

To just make sure this was available to more schools every year! It was great!

using simpler vocabulary or explain it in simpler terms. For example, my students haven't learned percentages yet.

We had some miscommunication when planning our presentation.

We the 4th grade teachers had a complaint - that one of the presenters complained about noise coming from the cafeteria and slammed the cafeteria doors instead of letting them shut their doors. Cafeteria is the gym where the presentation was.

Home Energy Worksheet (English)

Teacher ID:

Teacher Name:

Be **wattsmart**
Begin at home

Home Energy Worksheet

Student First Name:

Heating

1. Install and use a programmable or smart thermostat.
☐ Currently do ☐ Will do
☐ Neither
2. Caulk windows and weather strip outside doors.
☐ Have done ☐ Will do
☐ Neither
3. Inspect attic insulation and add insulation if needed.
☐ Have done ☐ Will do
☐ Neither
4. Keep furnace air filters clean/replaced regularly.
☐ Currently do ☐ Will do
☐ Neither

Cooling

5. Replace existing air conditioning unit with a high-efficiency unit or an evaporative cooling unit.
☐ Have done ☐ Will do
☐ Neither
6. Close blinds when windows are exposed to the sun.
☐ Currently do ☐ Will do
☐ Neither
7. Use a fan instead of air conditioning.
☐ Currently do ☐ Will do
☐ Neither
8. In the summer, set thermostat to 78 degrees F or higher.
☐ Currently do ☐ Will do
☐ Neither

Water heating

9. Set the water heater temperature to 120 degrees F.
☐ Have done ☐ Will do
☐ Neither
10. Install a high-efficiency showerhead.
☐ Have done ☐ Will do
☐ Neither
11. Take 5 minute showers.
☐ Currently do ☐ Will do
☐ Neither

12. Wash full loads in the dishwasher and clothes washer.
☐ Currently do ☐ Will do
☐ Neither

Lighting

13. Replace incandescent bulbs with LED bulbs.
☐ Have done ☐ Will do
☐ Neither
14. Turn lights off when not in use.
☐ Currently do ☐ Will do
☐ Neither

Refrigeration

15. Replace old, inefficient refrigerator with an ENERGY STAR® model.
☐ Have done ☐ Will do
☐ Neither
16. Unplug old freezers/refrigerators and/or dispose of them in an environmentally safe manner.
☐ Have done ☐ Will do
☐ Neither
17. Maintain refrigerator and freezer coils and check door seals twice yearly.
☐ Currently do ☐ Will do
☐ Neither

Electronics

18. Turn off computers, TVs and game consoles when not in use.
☐ Currently do ☐ Will do
☐ Neither

Cooking

19. Use a microwave oven, toaster oven, crock pot or outdoor grill instead of a conventional oven.
☐ Currently do ☐ Will do
☐ Neither

Get paid for being wattsmart

20. Visit Rocky Mountain Power at wattsmart.com for more energy-saving tips and rebates.
☐ Have done ☐ Will do
☐ Neither



WAT ID

Home Energy Worksheet (Spanish)

Nombre del profesor(a):

Ser **wattsmart**
Empieza en casa

Verificación de la Energía Doméstica

Primer nombre del estudiante:

Calefacción

1. Instalar y usar un termostato programable o termostato inteligente.
☐ Lo hago ☐ Lo haré ☐ Ninguno
2. Calafatear ventanas e instalar burletes en el exterior de las puertas.
☐ Lo he hecho ☐ Lo haré ☐ Ninguno
3. Inspeccionar el aislamiento del ático y agregar aislamiento si es necesario.
☐ Lo he hecho ☐ Lo haré ☐ Ninguno
4. Mantener los filtros de aire de la calefacción limpios/reemplazarlos regularmente.
☐ Lo hago ☐ Lo haré ☐ Ninguno

Enfriamiento

5. Reemplazar la unidad de aire acondicionado existente por una unidad de alta eficiencia o un enfriador evaporativo.
☐ Lo he hecho ☐ Lo haré ☐ Ninguno
6. Cerrar las persianas cuando las ventanas estén expuestas al sol.
☐ Lo hago ☐ Lo haré ☐ Ninguno
7. Usar un ventilador en lugar del aire acondicionado.
☐ Lo hago ☐ Lo haré ☐ Ninguno
8. En el verano, ajustar el termostato a 78 grados F o más.
☐ Lo hago ☐ Lo haré ☐ Ninguno

Calentando agua

9. Programar el calentador de agua a 120 grados F.
☐ Lo he hecho ☐ Lo haré ☐ Ninguno
10. Instalar una cabezal de ducha de alta eficiencia.
☐ Lo he hecho ☐ Lo haré ☐ Ninguno

11. Tomar duchas de 5 minutos.

☐ Lo hago ☐ Lo haré ☐ Ninguno

12. Lavar cargas llenas en los lavaplatos y las lavadoras de ropa.

☐ Lo hago ☐ Lo haré ☐ Ninguno

Iluminación

13. Reemplazar los focos incandescentes con focos LED.

☐ Lo he hecho ☐ Lo haré ☐ Ninguno

14. Apagar las luces cuando no estén en uso.

☐ Lo hago ☐ Lo haré ☐ Ninguno

Refrigeración

15. Reemplazar refrigerador antiguo e ineficiente con modelo de ENERGY STAR®.

☐ Lo he hecho ☐ Lo haré ☐ Ninguno

16. Desenchufar viejos refrigeradores/congeladores y/o desecharlos de una manera ambientalmente segura.

☐ Lo he hecho ☐ Lo haré ☐ Ninguno

17. Mantener la bobina del refrigerador y del congelador e inspeccionar el sello de las puertas de dos veces al año.

☐ Lo hago ☐ Lo haré ☐ Ninguno

Electrónicos

18. Apagar computadoras, televisores y consolas de juegos cuando no estén en uso.

☐ Lo hago ☐ Lo haré ☐ Ninguno

Cocinar

19. Usar un horno microonda, un horno eléctrico, una olla de cocimiento lento o una parrilla de aire libre en lugar del horno convencional.

☐ Lo hago ☐ Lo haré ☐ Ninguno

Reciba paga siendo wattsmart

20. Visite Rocky Mountain Power en wattsmart.com para obtener más consejos y rebajas de ahorro de energía.

☐ Lo he hecho ☐ Lo haré ☐ Ninguno

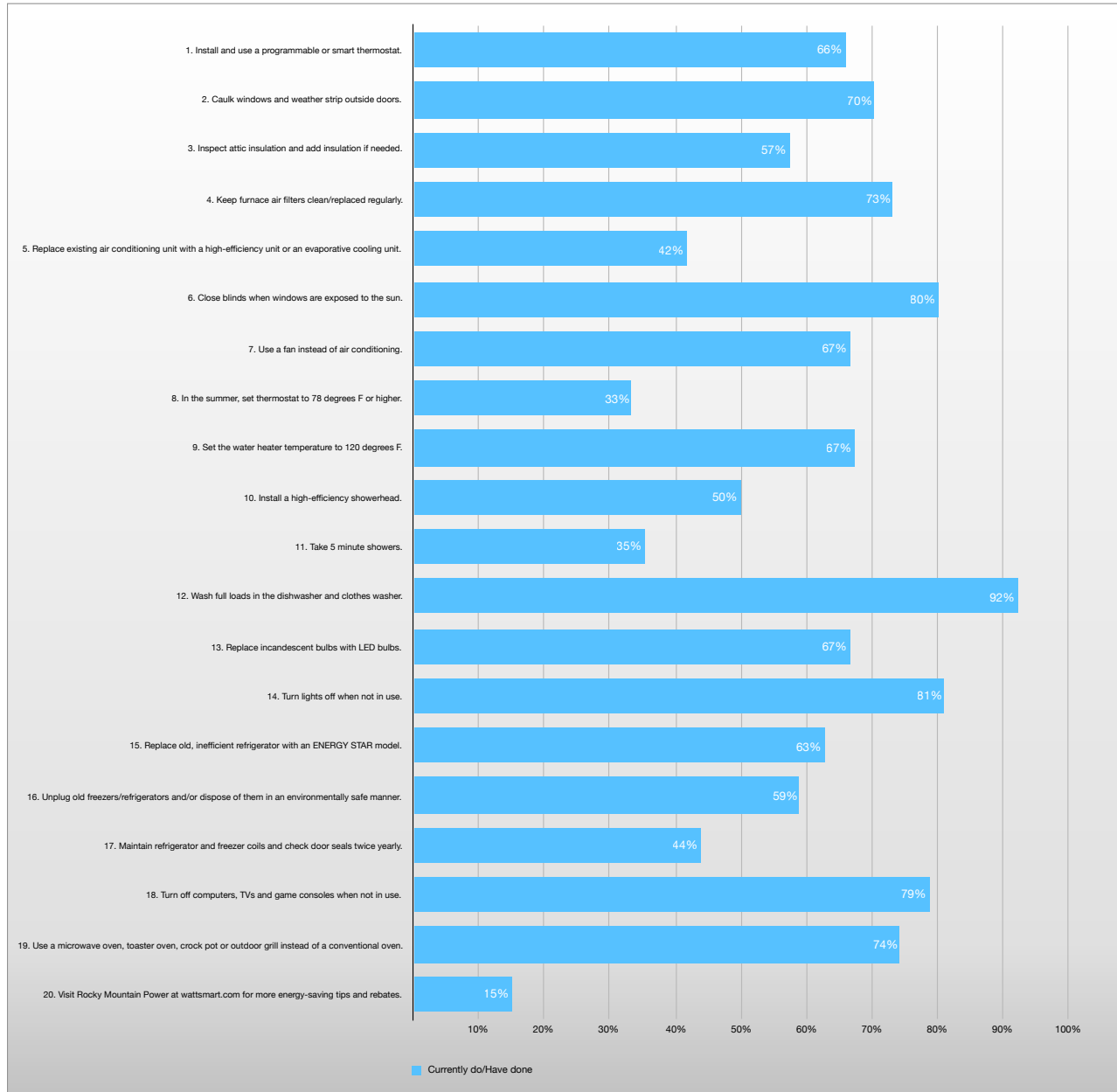


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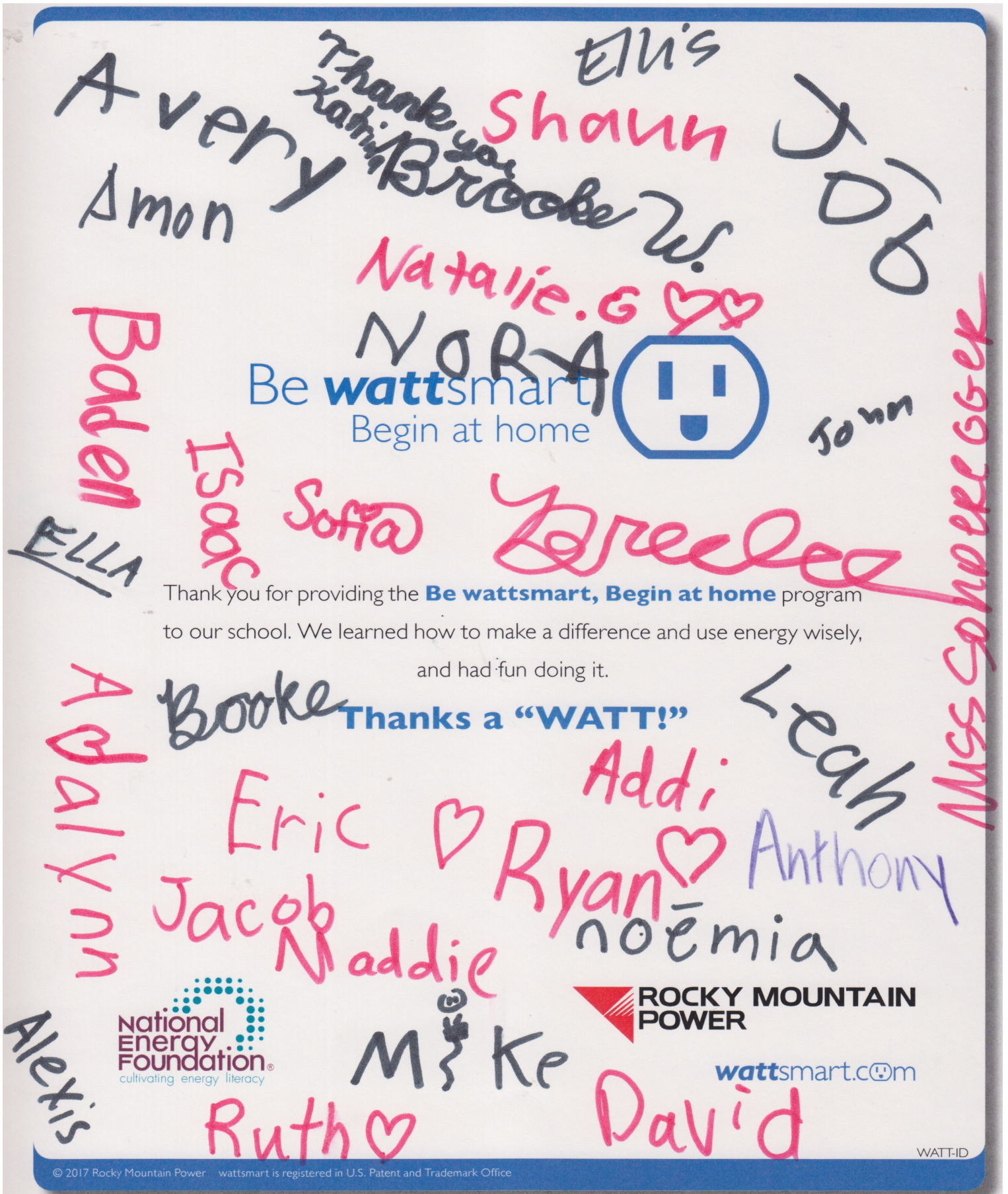
Home Energy Worksheet Summary – Rocky Mountain Power

Energy Efficient Activity	Currently do/Have done	Will do	Neither
1. Install and use a programmable or smart thermostat.	66%	13%	22%
2. Caulk windows and weather strip outside doors.	70%	18%	12%
3. Inspect attic insulation and add insulation if needed.	57%	20%	22%
4. Keep furnace air filters clean/replaced regularly.	73%	18%	9%
5. Replace existing air conditioning unit with a high-efficiency unit or an evaporative cooling unit.	42%	12%	46%
6. Close blinds when windows are exposed to the sun.	80%	9%	11%
7. Use a fan instead of air conditioning.	67%	13%	21%
8. In the summer, set thermostat to 78 degrees F or higher.	33%	17%	49%
9. Set the water heater temperature to 120 degrees F.	67%	18%	15%
10. Install a high-efficiency showerhead.	50%	21%	29%
11. Take 5 minute showers.	35%	29%	36%
12. Wash full loads in the dishwasher and clothes washer.	92%	4%	4%
13. Replace incandescent bulbs with LED bulbs.	67%	23%	10%
14. Turn lights off when not in use.	81%	16%	2%
15. Replace old, inefficient refrigerator with an ENERGY STAR model.	63%	15%	23%
16. Unplug old freezers/refrigerators and/or dispose of them in an environmentally safe manner.	59%	16%	25%
17. Maintain refrigerator and freezer coils and check door seals twice yearly.	44%	40%	16%
18. Turn off computers, TVs and game consoles when not in use.	79%	17%	4%
19. Use a microwave oven, toaster oven, crock pot or outdoor grill instead of a conventional oven.	74%	11%	15%
20. Visit Rocky Mountain Power at wattsmart.com for more energy-saving tips and rebates.	15%	64%	21%

Wise Energy Behaviors in Rocky Mountain Power Idaho Homes



Sampling of Thanks a "WATT" Cards



Yahani Resendiz
Thank you for coming in
our class I learned alot about energy
and alot more

Breanna Figueroa
Thank you for
coming in our
class I loved
what I leand
today

Thank you
for showing
us how to
save electricety

Will Slagowski
Thank you for
coming

Jaylyn
thank you
for coming
to our class

Jordan
I love the notes,
it is an

Be **wattsmart**
Begin at home



my name ~~is~~ Gabriel
mi no pick: ~~ish~~

Thank you for providing the **Be wattsmart, Begin at home** program
to our school. We learned how to make a difference and use energy wisely,
and had fun doing it.

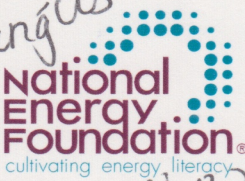
Thanks a "WATT!"

Thank you for
leting me play
lingo.
Wyatt Slagowski

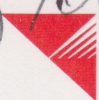
Thank you for
showing how to
save enrgy from clael
I Love to Play Lingo

Thank you
for showing
us how to
use enrgy
and save.

Thank
you so much
for coming to
Indy Boss Elementary
& teaching us more
about
how to
be "watt
Smart"
ms. Clarke



Niguel thank you



ROCKY MOUNTAIN
POWER

wattsmart.com

WATT-ID

Thank you
Triston

Thank you
so much, Zarrab

Thanks a lot
♥ Reginir

Thank you
so much for
coming to our
school you guys
are amazing

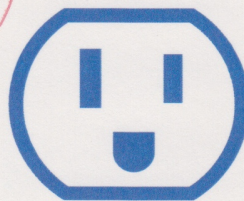


Thank you
for coming
to our school
Gustavo

Thank you,
for coming
to our school
and teaching
us about
electricity.

William

Be **wattsmart**
Begin at home



Thanks
a bunch!
♥ Sydney

Colet
Thank you!!!

Thank you
so much!
Patty B

Thank you
so much
for coming

Thank you for providing the **Be wattsmart, Begin at home** program
to our school. We learned how to make a difference and use energy wisely,
and had fun doing it.

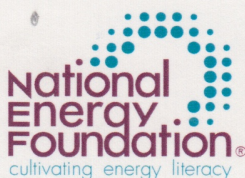
Thanks
for coming
to our school

Thanks a "WATT!"

Thank you

Thank you
for teaching
us how to
save money
and energy
♥ Tabitha

Thanks for
coming to our
school!
Kevin

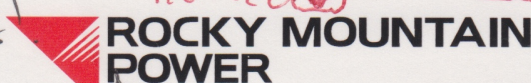


! Thank you!
Danny

Thank you
so much
for coming
to our school!
Romeo



Loved it!
Thank you
Mrs. Rasmussen



wattsmart.com

Thanks for coming to our school

Drayke H. Milo

Francisco S.

ADDISSA

Gabe

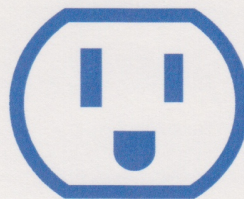
Liz ee
thank you
♡

Jarreh

Cooper ★

Shawna

Be **wattsmart**
Begin at home



★
Laurele
thank you ♡

S. Salee

Jo-Hannah

Sydney
R.

Thank you for providing the **Be wattsmart, Begin at home** program
to our school. We learned how to make a difference and use energy wisely,
and had fun doing it.

Tyson Freed

Thanks a "WATT!"

Hanna S.
Thank you!

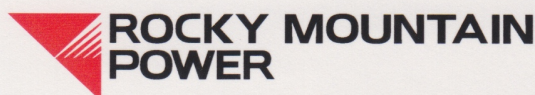
Taylyn
M.

Sarah J.

Braylee
H.



Dallin



wattsmart.com

Korbyn

Ivan

WATT-ID

Bra xton Coen

Mason

Bethany

Isabella

Natalie

Isabella

gory

Kayla Si

emma

Be **watt**smart
Begin at home



Oaklee

OJolo

Thank you for providing the **Be wattsmart, Begin at home** program to our school. We learned how to make a difference and use energy wisely, and had fun doing it.

Thanks a "WATT!"

Anvil

Jesse

Jayten

Carson

Ty tan

Jake

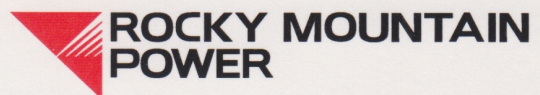
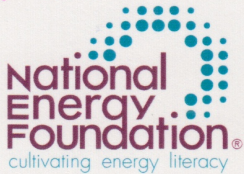
Braxton

Wayne

Jayden

Unk. Reese

Col



wattsmart.com

Ted

Dotty

Marlee

WATT-ID

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Appendix 8

Idaho Program Evaluation Recommendations and Responses

Idaho 2017 Evaluations

Program Evaluation Recommendations and Company Responses

Evaluation reports provide detailed information on the process and impact evaluations performed on each program, summarizing the methodology used to calculate the evaluated savings as well as providing recommendations for the Company to consider for improving the process or impact of the program, as well as customer satisfaction.

Outlined below is a list of the programs, the years that were evaluated and published during 2017, and the third party evaluator who completed the evaluation. Program evaluations are available for review at www.pacificorp.com/es/dsm/idaho.html

Program	Years Evaluated	Evaluator
Home Energy Reports	2015 – 2016	Navigant
Home Energy Savings	2015 - 2016	Cadmus
Low Income Weatherization	2013 - 2015	Opinion Dynamics
wattsmart Business	2014 - 2015	Cadmus

The third party evaluator's recommendations and Company's responses are provided in the tables below.

Table 1
Home Energy Reports Evaluation Recommendations

Evaluation Recommendations	Rocky Mountain Power Response
Future refill waves should target the highest usage customers not already in the program. Prior to adding future refill waves, the program should verify that the allocation of households across the treatment and control groups is consistent with a RCT.	Future program refills will include customers who meet eligibility requirements in accordance with best practices for behavioral energy efficiency programs. The program manager add refill customers once a new administrative contract is in place.

Table 2
Home Energy Savings Evaluation Recommendations

Evaluation Recommendations	Rocky Mountain Power Response
Require the wattsmart kit program administrators to collect kit participant phone numbers and e-mail addresses for kit program survey data collection activities. [As of October 2017, the program administrator reported that customer e-mail addresses and phone numbers were mandatory online field entries for customers applying for kits.]	The phone number and email address fields are required.
For Upstream lighting point-of-sale merchandizing data, track dates and locations for the program's merchandising and product placements. Providing model numbers, store locations, dates, and display types (e.g., end caps, pallet displays) allows more precise estimates of program-generated sales lift.	Improved tracking activities for product placement are in place for the program year 2018 and beyond.

Table 3
Low Income Weatherization Evaluation Recommendations

Evaluation Recommendations	Rocky Mountain Power Action Plan
Rocky Mountain Power should continue to use the same Program implementers moving forward.	Rocky Mountain Power will continue to partner with Eastern Idaho Community Action Partnership and SouthEastern Idaho Community Action Agency.
In addition to the Company's current efforts to increase its funding of the LIW program, consider branding the agency staff who conduct the audits and installation services by wearing t-shirts with the RMP name and logo.	Rocky Mountain Power's program manager will discuss this recommendation with internal legal staff and agency staff.
Since EICAP exhausted their Program funding and SEICCA did not use all of its funding, Rocky Mountain Power may revisit the funding levels to each agency and consider giving more to EICAP and less to SEICCA.	The contracts between Rocky Mountain Power and the agencies allow for funds to move from one agency to the other. The program manager will discuss this component with the agency's weatherization directors.
Rocky Mountain Power should take a historical look at participation amongst its low income population that likely has electric heat to determine how much of the market has been penetrated thus far. This exercise could also help to identify and target households that have not participated yet.	The Company will look into the potential of comparing the addresses of households that received federally funded LIHEAP funds over the past year, as they would have electric heat, and compare those addresses to homes treated since the program was established. The recommendation may be complicated because data on homes completed are in three internal data bases.
To reduce costs, Rocky Mountain Power should help the agencies determine if a client has electric heat through consumption records before visiting the home. The average electric consumption for low income households with electric heat could help agencies	Rocky Mountain Power provides usage data to agencies per their request. The Company's program manager will remind staff that the monthly consumption data available is a good indicator as to whether or not homes have electric heat.

Evaluation Recommendations	Rocky Mountain Power Action Plan
determine if a client is in the general ballpark before visiting the home.	
RMP should explore a financing tariff that allows a utility to address both structural and energy improvements through its low income weatherization program at no cost to the client. More information on this innovative tariff and how it operates can be found in the embedded documents in Appendix B of the evaluation.	Rocky Mountain Power has issues with this recommendation: 1. A program goal is to increase kWh savings resulting in lower billings to income eligible households. The Pay As You Save Program included in Appendix B decreases the dollar savings to participants as their kWh savings are covering the program costs. 2. The evaluation indicated that the program is not cost effective. Adding additional costs from services that address structural improvements (which do not provide kWh savings) and additional administrative costs would reduce the overall program cost effectiveness further. 3. Low income households may move more often than the average resident and the remaining costs would be due at the time of their move. Or these costs would be the responsibility of the next inhabitants even though they did not agree to participate in Pay As You Save.

Table 4
wattsmart Business Evaluation Recommendations

Evaluation Recommendations	Rocky Mountain Power Response
Reduce the cool roof measure deemed claimed savings amount from the 0.33 kWh per year per square foot assumption currently used from DEER to 0.13 kWh per year per square foot.	The Company will evaluate this recommendation, the sources cited, and the cost effectiveness ramifications of making a change to this measure within the wattsmart program.
Once an incentivized project is completed where VFDs are installed on potato and onion storage facilities, have the program implementer interview the facility staff to determine the ventilation schedule and airflow rates. These variables should be updated on the prescriptive calculators to accurately reflect the existing operating characteristics.	The Company will evaluate this recommendation for cost effectiveness.
Assess market penetration by comparing the program participant database to RMP's overall customer database to identify high-usage customers in sectors other than Dairy and Agriculture. Employ a targeted campaign for these high usage customers that have low or no participation, and/or develop additional enhanced offerings (such as SBL), to address specific needs of these customers.	The Company will evaluate this recommendation for cost effectiveness.
Program Data Interface: Assess the size of any data exchange inconsistencies and associated impacts, and identify the most appropriate solution.	The Company maintains strict controls for the accuracy of reporting project savings and payment of incentives. The Company will continue to assess potential data inaccuracies and will make adjustments,

Evaluation Recommendations	Rocky Mountain Power Response
	while maintaining proper controls over accurate data exchanges.
SBL - RMP may want to consider directing the SBDI program implementer to actively seek and record SBDI participant feedback on website usability for this channel.	Steps have been taken to begin receiving customer feedback on program experience via real-time participant surveys. This data will guide continuous improvement for program design and potential streamline opportunities.
Customer Analysis - Increase communication with the participant before the project begins to increase their satisfaction and reduce confusion and disagreement.	RMP has implemented outsourced delivery contractor customer training in 2017 in an effort to improve customer communication. Steps have been taken to begin receiving customer feedback on program experience via real-time participant surveys. This data will guide continuous improvement for program design and potential streamline opportunities.
Nonparticipants - If additional program growth is desired in any of the program delivery channels, encourage and/or incentivize trade allies to increase their outreach to their nonparticipant customers.	The Company will evaluate this recommendation should additional program growth be desired.