Utah Energy Efficiency and Peak Reduction Annual Report

January 1, 2016 – December 31, 2016

Issued June 15, 2017

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TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

CFL	Compact Fluorescent Lighting
DSM	Demand-side Management
HCD	Utah Department of Workforce Services, Housing and Community Development Division
HVAC	Heating, Ventilation and Air Conditioning
IRP	Integrated Resource Plan
kW	Kilowatt
kWh	Kilowatt hour
LED	Lighting-emitting Diode
MW	Megawatt
MWh	Megawatt hour
NTG	Net-to-Gross
PCT	Participant Cost Test
PTRC	Total Resource Cost Test with 10 percent adder
RIM	Ratepayer Impact Measure Test
Schedule 193	Demand-Side Management Cost Adjustment
TRC	Total Resource Cost Test
UCT	Utility Cost Test
VFD	Variable Frequency Drive

EXECUTIVE SUMMARY

PacifiCorp is a multi-jurisdictional electric utility providing retail service to customers in Utah, California, Idaho, Oregon, Washington, and Wyoming. Rocky Mountain Power, a division of PacifiCorp ("Company"), serves approximately 850,000 customers in Utah. Rocky Mountain Power, working in partnership with its retail customers and with the approval of the Public Utilities Commission of Utah ("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 Utah 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 status of the Demand-Side Management Cost Adjustment tariff rider ("Schedule 193") revenue for the performance period from January 1, 2016 through December 31, 2016.[1] The Company, on behalf of its customers, invested $60.4 million in energy efficiency and peak reduction resource acquisitions during the reporting period. The investment yielded approximately 334,147 megawatt hours ("MWh") in first year energy savings,[2] 3,550,537 MWh of lifetime savings[3] from 2016 energy efficiency acquisitions and approximately 65 megawatts ("MW") of capacity reduction from energy efficiency savings[4] and realized reductions associated with peak management activities of approximately 127 megawatts.[5] Net benefits based on the projected value of the energy savings over the life of the individual measures are estimated at $112 million.[6]

The Demand-side Management ("DSM") portfolio was cost effective based on four of the five standard cost effectiveness tests[7] for the reporting period. The ratepayer impact cost test was less than 1.0 indicating near-term upward pressure was placed on the price per kilowatt-hour ("kWh") given a reduction in sales. The DSM portfolio cost effectiveness is provided in Table 1. Annual performance information for 2016 cost effectiveness is provided in detail in Appendix 2.

[1] Appendix 1 provides specific requirements from Docket No. 17-035-04 and where they are located in the annual report and appendices.
[2] Reported ex-ante savings are gross and at generation.
[3] Estimated lifetime savings of 2016 Energy Efficiency Acquisitions was calculated by multiplying First Year Acquisitions (measured at the generator) by the weighted average measure life of the portfolio of 10.6 years. No discount was assumed for possible savings degradation over the life of the measures. Savings are gross at generator.
[4] See Planning Process Section for explanation on how the capacity contribution savings values are calculated.
[5] Realized load as measured at generation.
[6] See Table 1 – Utility Cost Test Net Benefits.
[7] Cost effectiveness results include realization rates and Net-to-Gross ("NTG") ratios.

Table 1 – DSM Portfolio Cost Effectiveness

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PacifiCorp Total Resource Test plus 10 percent (PTRC)[8]	1.89	$119,470,080
Total Resource Cost Test (TRC)[9]	1.72	$96,407,238
Utility Cost Test (UCT)[10]	1.94	$111,996,428
Participant Cost Test (PCT)[11]	2.61	$149,483,273
Ratepayer Impact Cost Test (RIM)[12]	0.89	($28,871,030)

2016 Performance Compared to Forecast

In Docket No 15-035-48 filed November 2, 2015, the Company filed its 2016 forecast for Class I load control and Class II energy efficiency programs against its Integrated Resource Plan ("IRP") forecast. Overall, the Company achieved 93% of its Class I and Class II forecast. The *Irrigation Load Control* program experienced higher than expected participant opt-outs. For the Class II achieved savings, the residential sector was not meeting its forecasted target. Subsequently, the decision was made to ramp up non-residential participation. Table 2 compares the November filings to actual savings achieved.

[8] The PTRC is the total resource cost test with an additional 10 percent added to the benefit side of the benefit/cost formula to account for non-quantified environmental and non-energy benefits of conservation resources over supply side alternatives.
[9] The TRC considers the benefits and costs from the perspective of all utility customers, comparing the total costs and benefits from both the utility and utility customer perspectives. It's assumed to be the closest in valuation methodology to how supply-side resources are valued.
[10] The UCT provides a benefit to cost perspective from the utility only, comparing the total utility cost incurred to the benefit/value of the energy and capacity saved and contains no customer costs or benefits in calculation of the ratio.
[11] The PCT compares the portion of the resource paid directly by participants to the savings realized by the participants.
[12] The RIM examines the impact of energy efficiency expenditures on non-participating ratepayers overall. Unlike supply-side investments, energy efficiency programs reduce energy sales. Reduced energy sales can lower revenue requirements while putting near-term upward pressure on rates as the remaining fixed costs are spread over fewer kilowatt-hours.

Table 2 - 2016 Forecast to Actual Savings Comparison

Utah DSM 2016 Projected Savings	2015 IRP for 2016 (Gross - at Gen)		2016 Forecast (Gross - at Gen)		2016 Actual (Gross - at Gen)	
	MWH	MW	MWH	MW	MWH	MW
Class 1 - Load Control Programs						
A/C Load Control		115		115		113
Irrigation Load Control		20		20		14
Total Class 1		**135**		**135**		**127**
Class 2 - Residential Programs						
Low Income			426	0	230	0
New Homes			3,454	1	3,598	1
Home Energy Reports			62,476	12	53,833	10
Refrig. Recycle			15,237	3	169	0
Home Energy Savings			71,223	14	49,910	10
Total Residential Class 2	**N/A**		**152,816**	**29**	**107,739**	**21**
Class 2 - Non-Residential Programs						
wattsmart Business			212,316	41	226,408	43
Total Non-Residential Class 2	**N/A**		**212,316**	**41**	**226,408**	**43**
Total Class 2	**303,040***	**58**	**365,132**	**70**	**334,147**	**64**

*Includes incremental HER savings only.

2016 Performance

Program and Sector level results for 2016 are provided in Table 3.

Table 3[13]
Utah Program Results for January 1, 2016 – December 31, 2016[14]

Load Management Programs	MW/Yr Savings (at site)	MW/Yr Savings (at gen)	Program Expenditures
Cool Keeper	103	113	$ 4,573,746.18
Irrigation Load Control	13	14	$ 426,103.31
Total Load Management	**116**	**127**	**$ 4,999,849**
Energy Efficiency Programs	**kWh/Yr Savings (at site)**	**kWh/Yr Savings (at gen)**	**Program Expenditures**
Low Income Weatherization	210,154	229,737	$ 59,339
New Homes	3,290,951	3,597,602	$ 1,453,696
Refrigerator Recycling	154,191	168,559	$ 25,376
Home Energy Savings	45,655,622	49,909,813	$ 11,680,011
Home Energy Reporting	49,244,502	53,833,105	$ 2,758,456
Total Residential	**98,555,421**	**107,738,815**	**$ 15,976,879**
watt smart Business Agricultural	10,851,979	11,854,062	$ 1,100,018
watt smart Business Commercial	133,500,517	145,131,082	$ 20,054,995
watt smart Business Industrial	65,589,443	69,423,146	$ 10,315,226
watt smart Business Portfolio			$ 6,356,869
Total *watt* smart Business	**209,941,939**	**226,408,290**	**$ 37,827,108**
Total Energy Efficiency	**308,497,359**	**334,147,105**	**$ 53,803,987**
Outreach & Communications + Class 4			
Outreach and Communication Campaign			$ 1,317,861
Total System Benefit Expenditures - All Programs			**$ 55,121,847**
Portfolio Technical Reference Library			$ 26,223
Portfolio Potential Study			$ 58,754
Portfolio Training			$ 36,588
Portfolio DSM Central			$ 125,051
Total Utah Program Expenditures			**$ 60,368,313**

[13] Reported savings are ex-ante.
[14] The values at generation include line losses between the customer site and the generation source. The Company's line losses by sector for 2016 are 9.32 percent for residential, 8.71 percent for commercial, 5.85 percent for industrial and 9.24 percent for irrigation.

REGULATORY ACTIVITIES

During the reporting period, the Company made a number of filings with the Commission to be in compliance with various reporting requirements and to modify DSM programs. The Company also provided various reports and evaluations to the DSM Steering Committee, per Commission order.

- On January 19, 2016, the Company filed for modifications to the Low Income Weatherization Program in Docket No. 16-035-T01. Key modifications included adding LED bulbs and fixtures as new offerings. The Commission approved these modifications in its order issued February 12, 2016, with an effective date of March 1, 2016.
- On February 2, 2016, the Company circulated its quarterly DSM Balancing Account Report for the fourth quarter of 2015 to the DSM Steering Committee.
- On February 5, 2016, the Company filed to cancel the See ya later, refrigerator Appliance Recycling Program in Docket No. 16-035-T02. The Commission approved the cancelation in its order issued March 1, 2016, with an effective date of March 6, 2016.
- On February 9, 2016, the Company filed for modifications to the *watt*smart Business Program in Docket No. 16-035-T03. Key modifications included lowering lighting incentives and clarify all measure incentives as maximum not-to-exceed or "up to" amounts. The Commission approved these modifications in its order issued March 9, 2016, with an effective date of March 10, 2016.
- On April 15, 2016, the Company filed to permanently change the due date of the DSM Spring Semi-Annual Forecast Report from May 1st to July 1st in Docket No. 09-035-T08. The Commission approved the revised due date in its order issued April 20, 2016, with an effective date the same day.
- On April 25, 2016, the Company circulated its quarterly DSM Balancing Account Report for the first quarter of 2016 to the DSM Steering Committee.
- On May 9, 2016, the Company posted a 45-day notice on its website to make modifications to the *watt*smart Business LED Instant Incentive Program through the "up to" incentive process established in Docket No. 16-035-T03. Key modifications included lowering lighting incentives offered through the mid-market channel. Notice of these changes was also sent to the DSM Steering Committee on May 9, 2016. These modifications went into effect June 22, 2016.
- On May 23, 2016, the Company filed its 2015 Energy Efficiency and Peak Reduction Report in Docket No. 16-035-17. The Commission acknowledged the report as being compliant with reporting requirements in its correspondence issued July 12, 2016.
- On July 1, 2016, the Company filed its DSM Spring Semi-Annual Forecast Report in Docket No. 16-035-30. The Commission acknowledged the report as being compliant with reporting requirements in its correspondence issued August 24, 2016.
- On July 26, 2016, the Company filed for modifications to the Cool Keeper Program in Docket No. 16-035-T10. Key modifications included streamlining the tariff and removing outdated information. The Commission approved these modifications in its order issued November 16, 2016, with an effective date of December 1, 2016.
- On July 28, 2016, the Company circulated its quarterly DSM Balancing Account Report for the second quarter of 2016 to the DSM Steering Committee.

- On July 28, 2016, the Company provided notice to the DSM Steering Committee that the 2013-2014 Home Energy Savings Evaluation Report had been posted to the Company's website.
- On August 5, 2016, the Company filed for modifications to the *watt*smart Business Program in Docket No. 16-035-T11. Key modifications included the reinstatement of the enhanced incentive for small businesses as a restructured small business direct install offering. The Commission approved these modifications in its order issued August 31, 2016, with an effective date of September 5, 2016.
- On September 6, 2016, the Company made a compliance filing to provide supplemental information requested by DSM Steering Committee members regarding DSM program participation and measure data.
- On September 27, 2016, the Company provided notice to the DSM Steering Committee that the 2014-2015 Home Energy Reports Evaluation Report had been posted to the Company's website.
- On November 1, 2016, the Company filed its DSM Fall Semi-Annual Forecast Report in Docket No. 16-035-30. The Commission acknowledged the report as being compliant with reporting requirements in its correspondence issued December 21, 2016.
- On November 1, 2016, the Company filed for modifications to the New Homes and Home Energy Savings Program in Docket No. 16-035-T13. Key modifications included consolidating the New Homes Program within the Home Energy Savings Program, restructuring incentives tables and updating measures within the Home Energy Savings Program, and rename the Home Energy Savings Program as Residential Energy Efficiency with it marketed as *watt*smart Homes to align with the *watt*smart Business Program. The Commission approved these modifications in its order issued November 29, 2016, with an effective date of December 1, 2016.
- On November 10, 2016, the Company circulated its quarterly DSM Balancing Account Report for the third quarter of 2016 to the DSM Steering Committee.
- On November 17, 2016, the Company posted a 45-day notice on its website to make modifications to the *watt*smart Business LED Instant Incentive Program and prescriptive retrofit lighting measures through the "up to" incentive process established in Docket No. 16-035-T03. Key modifications included increasing the incentive for TLED lamps offered through the mid-market channel and lowering the incentive for the TLED lamp prescriptive offering. Notice of these changes was sent to the DSM Steering Committee on November 18, 2016. These modifications went into effect January 1, 2017.
- On November 23, 2016, the Company filed for modifications to the Schedule 193 surcharge rate, specifically to lower the rate from 4.0 percent to 3.68 percent. The Commission approved these modifications in its order issued December 22, 2016, with an effective date of January 1, 2017.
- On December 1, 2016, the Company filed for approval of its 2017 Strategic Communications and Outreach Plan for DSM programs in Docket No. 16-035-49. The Commission approved the plan in its order issued December 28, 2016, with an effective date of January 1, 2017.

Advisory Group and Steering Committee Activities:

Consistent with the discussion in Docket No. 12-035-69, the Company seeks input regarding its energy efficiency programs from both the Utah DSM Steering Committee and the Utah DSM Advisory Group. Both groups include representatives from a variety of constituent organizations. Members of the Steering Committee, who are not already governed by Commission confidentiality rules, signed Confidentiality Agreements with the Company in order to provide input on issues involving sensitive, confidential, or proprietary information.

The Company consulted with the DSM Steering Committee and DSM Advisory Group throughout 2016 on various matters, and held formal meetings on the following matters:

<u>February 4, 2016 – DSM Steering Committee</u>

- Provided updates on the Appliance Recycling Program, and
- Discussed proposed modifications to the *watt*smart Business Program.

<u>June 16, 2016 – DSM Advisory Group</u>

- Reviewed DSM program evaluation reports, and
- Reviewed the 2015 Annual Energy Efficiency and Peak Reduction Report.

<u>June 16, 2016 – DSM Steering Committee</u>

- Discussed DSM Amortization arising from the Sustainable Transportation and Energy Plan Act,
- Discussed upcoming proposed modifications to the New Homes and Home Energy Savings Programs,
- Provided updates on the small business offerings, and
- Discussed upcoming proposed modifications to the Cool Keeper Program.

<u>October 26, 2016 – DSM Steering Committee</u>

- Provided updates on the Low Income Weatherization Program,
- Provided updates on the Home Energy Savings and New Homes Programs,
- Discussed the DSM Fall Semi-Annual Forecast Report,
- Discussed upcoming proposed adjustments to the Schedule 193 surcharge rate,
- Discussed the necessity of future New Homes Program evaluations, and
- Discussed shifting evaluation, measure, and verification costs from program level to sector level.

<u>December 20, 2016 – DSM Advisory Group</u>

- Discussed the 2016 Smart Grid,
- Reviewed the 2017 DSM Strategic Plan, and
- Reviewed completed program evaluations for *watt*smart Business Strategic Energy Management and New Homes.

<u>December 20, 2016 – DSM Steering Committee</u>

- Discussed how the Company communicates with the DSM Steering Committee, and
- Reviewed the Annual Energy Efficiency and Peak Reduction Report requirements.

DSM EXPENDITURES

Energy efficiency and peak reduction activities are funded by revenue collected through Schedule 193. Expenditures are charged as incurred. The DSM balancing account is the mechanism used for managing Schedule 193 revenues collected and tracking the offsetting DSM incurred expenses. The balancing account summary for 2016 is shown in Table 4.

Table 4
Schedule 193 Balancing Account Summary

Month	Monthly Program Costs	Monthly Net Accrued Costs*	Rate Recovery	Carrying Charge	Cash Basis Accumulated Balance	Accrual Based Accumulated Balance
Balance Dec. 2015					$ 8,763,656	$ 14,269,913
Jan-16	$ 3,957,447	$ (640,324)	$ (6,219,137)	$ 49,232	$ 6,551,198	$ 11,417,132
Feb-16	$ 5,502,164	$ (97,141)	$ (5,812,722)	$ 41,254	$ 6,281,894	$ 11,050,687
Mar-16	$ 4,010,643	$ (101,376)	$ (5,114,181)	$ 21,274	$ 5,199,630	$ 9,867,047
Apr-16	$ 3,649,184	$ 1,887,279	$ (5,036,557)	$ 16,710	$ 3,828,967	$ 10,383,663
May-16	$ 4,189,551	$ (1,727,122)	$ (5,313,045)	$ 12,116	$ 2,717,589	$ 7,545,164
Jun-16	$ 7,211,523	$ (962,707)	$ (6,686,875)	$ 11,051	$ 3,253,289	$ 7,118,156
Jul-16	$ 3,541,878	$ 1,301,933	$ (8,541,981)	$ 2,793	$ (1,744,022)	$ 3,422,778
Aug-16	$ 5,719,256	$ (1,630,704)	$ (8,970,591)	$ (12,496)	$ (5,007,852)	$ (1,471,757)
Sep-16	$ 4,877,906	$ 1,748,387	$ (7,603,915)	$ (23,625)	$ (7,757,487)	$ (2,473,004)
Oct-16	$ 5,085,219	$ (1,078,842)	$ (5,966,674)	$ (30,402)	$ (8,669,344)	$ (4,463,703)
Nov-16	$ 7,231,444	$ (769,695)	$ (5,240,777)	$ (28,458)	$ (6,707,135)	$ (3,271,189)
Dec-16	$ 5,685,831	$ (742,558)	$ (6,051,036)	$ (25,549)	$ (7,097,889)	$ (4,404,501)
2016 Total	**$ 60,662,046**	**$ (2,812,870)**	**$ (76,557,491)**	**$ 33,900**		

*December 2016 total accrual was $2,693,388

Column Explanations:

Monthly Program Costs - Monthly expenditures for all DSM program activities posted in 2016.

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

Rate Recovery - Revenue collected through Schedule 193.

Carrying Charge - Monthly carrying charge based on "Cash Basis Accumulated Balance" of the account.

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 Based Accumulative Balance: Current balance of account including accrued costs.

PLANNING PROCESS

Integrated Resource Plan

The Company develops a biennial IRP as a means of balancing cost, risk, uncertainty, supply reliability/deliverability and long-run public policy goals.[15] The plan presents a framework of future actions to ensure the Company continues to provide reliable, reasonable-cost service with manageable risks to the Company's customers. Energy efficiency and peak management opportunities are incorporated into the IRP based on their availability, characteristics and costs.

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

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

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

As technical support for the IRP, a third-party demand-side resource potential assessment (Potentials Assessment) is conducted to estimate the magnitude, timing and cost of energy efficiency and peak management resources.[16] The main focus of the Potentials Assessment is on resources with sufficient reliability characteristics that are anticipated to be technically feasible and assumed achievable during the IRP's 20-year planning horizon. The estimated achievable energy efficiency potential identified in the 2015 Potentials Assessment for Utah is 7,454 GWh by

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

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

2034, or 22 percent of projected baseline loads.[17] By definition this is the energy efficiency potential that may be achievable to acquire during the 20-year planning horizon; prior to screening for cost effectiveness through the Company's integrated resource planning process.

The achievable technical potential of Class 2 (energy efficiency) resources for Utah by sector is shown in Table 5. The 2015 Potentials Assessment indicates that approximately 69 percent of the achievable technical potential for the Company, excluding Oregon,[18] is available within its Utah service area.[19]

Table 5
Utah Energy Efficiency Achievable Technical Potential by Sector

Sector	Cumulative GWh in 2034	Percent of Baseline Sales
Residential	2,025	21%
Commercial	4,017	32%
Industrial	1,369	12%
Irrigation	18	10%
Street Lighting	24	32%

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

The Company evaluates program implementation cost effectiveness (both prospectively and retrospectively) under a variety of tests to identify the relative impact and/or value (e.g. near-term rate impact, program value to participants, etc.) to customers and the Company.

Estimated Peak Contributions

The reported capacity reduction of 65 MW (at generation) for energy efficiency programs during 2016 represents the estimated MW impact of the energy efficiency portfolio during PacifiCorp's system peak period. An energy-to-capacity conversion factor developed from Class 2 DSM selections in the 2015 IRP is used to translate 2016 energy savings to estimated demand reduction during the system peak. The utilization of this factor in the MW calculation assumes that the energy efficiency resources acquired through the Company's programs have the same average load profile as those energy efficiency resources selected in the 2015 IRP. Utilization of this factor in determining the MW contribution of energy efficiency programs for 2016 is detailed in Table 6.

[17] Ibid, Volume 2, page 4-2.
[18] Oregon energy efficiency potentials assessments are performed by the Energy Trust of Oregon.
[19] Volume 1, Page 4-2, PacifiCorp Demand-Side Resource Potential Assessment for 2015-2034.

Table 6
Estimated Peak Contribution

Description	Value
First year energy efficiency program MWh savings acquired during 2016	334,147
Conversion factor: Coincident MW/MWh	0.000195
Estimated coincident peak MW contribution of 2016 energy efficiency acquisitions	65.01

PEAK REDUCTION PROGRAMS

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

Programs targeting capacity related resources are often specific to end use loads most prevalent in a given jurisdiction, such as the agricultural pumping and residential cooling loads in Utah. In 2016, the Company offered the *Irrigation Load Control* program (Schedule 105) for the agricultural sector and the *Air Conditioner Peak Management* Program (Cool Keeper Program, Schedule 114) for the residential and small commercial sectors.

The Peak Reduction Programs achieved a total of 127 MW of maximum realized demand reduction (gross at generation) in 2016. Cost effectiveness results for the reporting period are provided in Table 7.

Table 7
Cost Effectiveness for Load Control Portfolio[20]

Benefit/Cost Test	Benefit/Cost Ratio
PTRC	Pass
TRC	Pass
UCT	Pass
PCT	N/A
RIM	Pass

[20] Decrement values or avoided costs are considered confidential on load control programs. Cost effectiveness ratios and inputs will be available under a protective agreement. A "Pass" designation equates to a benefit to cost ratio of 1.0 or better.

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 enroll with a third party administrator and 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 from 12 pm to 8 pm Mountain Time, Monday through Friday, and do not include holidays. For most participants, their irrigation equipment is set up with a dispatchable two-way control system giving the Company control over their loads. 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's cost effectiveness results, performance and participation for the reporting period of May 31, 2016 – August 19, 2016 are provided in Tables 8 and 9.

Table 8
Cost Effectiveness for Irrigation Load Control

Benefit/Cost Test	Benefit/Cost Ratio
PTRC	Pass
TRC	Pass
UCT	Pass
PCT	N/A
RIM	Pass

Table 9
Irrigation Load Control Program Performance

Total Enrolled MW (Gross – at Gen)	37
Maximum Potential MW (at Gen)	14
Average Realized load MW (at Gen)	11
Maximum Realized load MW (at Gen)	13
Participation Customers	56
Participation (Sites)	219

Program Management

The program manager who is responsible for the *Irrigation Load Control* programs in Utah is also responsible for the *Irrigation Load Control* program in Idaho and the *Cool Keeper* program in Utah along with *Home Energy Reports* program in Utah, Idaho 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, including

- Customer satisfaction including call center support,
- Marketing to maintain a minimum level of megawatt reductions,
- Field operations including installation and maintenance of the EnerNOC devices,
- Management of participation data and reporting to actively manage the program,
- Quality control of the Irrigation Load Control device infrastructure,
- A platform to dispatch the communication network, and
- Customer incentives.

Irrigation Load Control Events and Performance

There were eight load control events initiated in 2016. The date, time and estimated impact for each event is provided in Table 10.

Table 10
Irrigation Load Control Events

Date	Event	Event Times	Load Reduction - Utah at Gen (MW)
June 21, 2016	1	3pm-7pm MDT	11
June 27, 2016	2	3pm-7pm MDT	13
June 29, 2016	3	3pm-7pm MDT	11
July 21, 2016	4	3pm-7pm MDT	11
July 26, 2016	5	3pm-7pm MDT	12
July 28, 2016	6	3pm-7pm MDT	12
August 15, 2016	7	3pm-7pm MDT	8
August 17, 2016	8	3pm-7pm MDT	8

Program Changes

No program changes occurred during 2016.

Evaluation

No evaluation activities occurred during 2016.

Cool Keeper

The *Cool Keeper* program is an air conditioner direct load management program targeting residential and qualifying commercial customers (equipment size equal to or less than 15 tons) who cool their homes and businesses with electric central air conditioners. On select summer weekday afternoons, when electricity demand is at its highest, the *Cool Keeper* control equipment installed on a participating customer's cooling equipment is sent a signal to cycle the operation of the air conditioners compressor "off and on" for brief periods each hour in coordination with the air conditioners of other participating customers. For their participation, customers receive an annual bill credit of $5 to $40 per air conditioner depending on the size of the air conditioner and when the customer signed up. If the customer signs up prior to June 1, the incentive is $20 or $40 and depends on the size of the A/C unit. After June 1, the incentive is pro-rated.

The Cool Keeper load control system operates through two-way communications equipment with a wireless mesh network for improved control, measurement and verification of program performance.

A summary of the program's cost effectiveness, performance and participation are provided in Tables 11 and 12 below.

Table 11
Cost Effectiveness for Cool Keeper

Benefit/Cost Test	Benefit/Cost Ratio
PTRC	Pass
TRC	Pass
UCT	Pass
PCT	NA
RIM	Pass

Table 12
Program Performance for Cool Keeper

Total Enrolled MW (at Gen)	216
Maximum Potential MW (at Gen)	113
Average Realized Load MW (at Gen)	106
Maximum Realized MW (Gross – at Gen)	113
Total Participation	108,269

Program Management

The program manager who is responsible for the *Cool Keeper* program in Utah is also responsible for the *Irrigation Load Control* programs in Utah and Idaho along with *Home Energy Reports* in Utah, Idaho and Wyoming. The program manager is responsible for managing the program

administrators, the cost effectiveness of the program, identifying and contracting with the program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set out in each tariff or state's compliance requirements.

Program Administration

The *Cool Keeper* program is administered by GoodCents and Eaton. GoodCents is responsible for:

- Field operations including trouble calls, installation, and maintenance of the Cool Keeper devices,
- Customer satisfaction including call center support,
- Management of Cool Keeper participation data and reporting to actively manage the program,
- Quality control of the Cool Keeper device infrastructure to ensure a 99% availability of active devices, and
- Marketing to maintain a minimum level of participation and megawatt reductions.

Eaton is responsible for:

- Manufacture and delivery of the Cool Keeper devices,
- Installation, operation, and maintenance of the wireless mesh communication network,
- Quality control of the wireless mesh network,
- A hosted solutions platform to dispatch and monitor the health of the communication network, and
- Program analytics including the ability to gain insight into the system and identify Cool Keeper devices which are no longer communicating.

Cool Keeper Load Control Events and Performance

There were three control events initiated in 2016. The date, time and estimated impact for each event is provided in Table 13.

Table 13
Cool Keeper Load Control Events

Date	Event	Event Times	Estimated Load Reduction - Utah at Gen (MW)
June 20, 2016	1	4:00PM – 7:00PM	105
June 22, 2016	2	4:00PM – 8:00PM	99
July 26, 2016	3	4:00PM – 4:31PM	113

Evaluation

No evaluation activities occurred during 2016.

ENERGY EFFICIENCY PROGRAMS

Energy Efficiency programs are offered to all major customer sectors: residential, commercial, industrial and agricultural. The overall energy efficiency portfolio included six programs: *Home Energy Savings* – Schedule 111, *Residential Refrigerator Recycling* – Schedule 117, *New Homes* – Schedule 110, *Home Energy Reports, Low Income Weatherization* – Schedule 118, and *Non-Residential Energy Efficiency* (*watt*smart Business) – Schedule 140. In addition to the energy efficiency programs, the Company, on behalf of customers, invested in outreach and education for the purpose of promoting the efficient use of electricity and improving program performance.

Energy efficiency savings are reported as ex-ante, gross and at site. In 2016, portfolio savings increased by approximately 7%, from 2015, while program-level expenditures decreased 1%. The portfolio was cost effective from four of the five cost tests. The ratepayer impact test was less than 1.0 indicating that there is near term upward pressure placed on the price per kWh given a reduction in sales. Cost effectiveness results of the 2016 Energy Efficiency Portfolio is provided in Table 14.

Table 14
Cost Effectiveness for Energy Efficiency Portfolio

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.75	$67,742,755
TRC	1.60	$53,425,784
UCT	2.60	$88,127,639
PCT	2.40	$130,370,608
RIM	0.73	($52,739,819)

Table 15 provides a program-level summary of Gross and Net savings acquired in 2016 at site and at generation.

Table 15
Energy Efficiency Gross and Net Savings[21]

Program	Gross kWh Savings at Site	Net kWh Savings at Site	Gross kWh Savings at Gen	Net kWh Savings at Gen
Low Income	210,154	147,108	229,737	160,816
Home Energy Reporting	49,244,502	49,244,502	53,833,105	53,833,105
Home Energy Savings	45,655,622	28,836,987	49,909,813	31,524,017
New Homes	3,290,951	1,950,276	3,597,602	2,132,003
Refrigerator Recycling	154,191	64,760	168,559	70,795
*watt*smart Business	209,941,939	152,055,251	226,408,290	155,310,847
Total	**308,497,359**	**232,298,884**	**334,147,105**	**243,031,582**

[21] Net savings include realization rates and NTG ratios.

The Company, working with its third-party program delivery administrators[22], collaborates with the following number of retailers, contractors and vendors in the delivery of its energy efficiency programs in Utah. Table 16 below lists the energy efficiency infrastructure. See Appendix 4 for a complete of Home Energy Savings retailers and Appendix 5 for the non-residential energy efficiency alliance.

Table 16
Energy Efficiency Infrastructure

Sector	Type	No.
Residential	Lighting Mid/Upstream Retailers	210
	Downstream Retailers	222
	HVAC Trade Allies	160
	Manufactured Homes Trade Allies	1
	Plumbing Contractors	2
	Weatherization Trade Allies	101
	Low Income Agencies	1
Commercial and Industrial	Lighting Trade Allies	173
	HVAC Trade Allies	75
	Motors Trade Allies	91

[22] See program specific information for backgrounds on third party administrators.

RESIDENTIAL PROGRAMS

The residential energy efficiency portfolio was comprised of five programs: *Home Energy Savings, Refrigerator Recycling*, *New Homes*, *Home Energy Reports*, and *Low Income Weatherization.* Residential savings decreased by approximately 40% from 2015. The decrease is largely driven by a reduction in savings in the *Home Energy Savings* program and the cancellation of the *Refrigerator Recycling* program.

The residential portfolio was cost effective based on four of the five standard cost effectiveness tests for the 2016 reporting period. Table 17 shows the cost effectiveness results for the residential portfolio.

Table 17
Cost Effectiveness for Residential Portfolio

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.87	$20,276,985
TRC	1.70	$16,313,425
UCT	2.48	$23,658,723
PCT	2.96	$44,108,028
RIM	0.68	($18,304,204)

Home Energy Savings

The *Home Energy Savings* program is designed to provide access to and incentives for more efficient products and services installed or received by customers in new or existing homes, multi-family housing units or manufactured homes for residential customers under Electric Service Schedules 1, 2, or 3. Landlords who own property where the tenant is billed under Electric Service Schedules 1, 2, or 3 also qualify for the program. Program cost effectiveness is provided in Table 18 below.

Table 18
Cost Effectiveness for Home Energy Savings

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	2.20	$21,182,692
TRC	2.00	$17,647,829
UCT	3.03	$23,668,611
PCT	2.98	$37,154,856
RIM	0.78	($10,180,461)

Program participation by measure category is provided in Table 19.

Table 19
Eligible Program Measure Categories (Units)

Measure Categories	Total kWh/Yr Savings @ Site	Total Incentive	Total Quantity
Appliances	652,823	$ 246,666	4,905
Building Shell	1,064,568	$ 595,717	3,306,714 (sq ft)
Energy Kits	213,736	$ 20,337	1,082
HVAC	10,191,265	$ 3,789,346	14,073
Lighting	33,518,040	$ 2,164,762	1,127,749
Water Heating	15,191	$ 7,000	11
Grand Total	**45,655,623**	**$ 6,823,828**	**1,147,820**

Program savings significantly decreased in 2016 compared to 2015. The decrease was primarily driven by a 94% decrease in CFL lighting. In 2016 manufacturers began reducing production of CFLS as they will no longer qualify under ENERGY STAR 2.0 specifications beginning in 2017.

Program Management

The program manager who is responsible for the *Home Energy Savings* program in Utah is also responsible for the *Home Energy Savings* program in Idaho and Wyoming. For each program and in each state the program manager is responsible for program cost effectiveness, identifying and contracting with the program administrator through a competitive bid process, establishing and

monitoring program performance and compliance, and recommending tariff changes in the terms and conditions.

Program Administration

The *Home Energy Savings* program is administered by CLEAResult, who is responsible for:

- 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.
- Manage savings acquisition to targets within budget.
- Continual improvement of program operations and customer satisfaction.
- Incentive processing and call-center operations – CLEAResult receives all requests for incentives, determines whether the applications are completed, works directly with customers when information is incorrect and/or missing from the application and processes the application for payment.
- Program specific customer communication and outreach – A summary of the communication and outreach conducted by CLEAResult on behalf of the Company are outlined in Appendix 7.

The *Home Energy Savings* program administration contract for all states expired in 2016 and a new contract was established on April 1, 2016.

Infrastructure

The total number of retailers and trade allies who participated in the program was 696. The list of participating and non-participating retailers and trade allies by delivery channel and measure is provided in Appendix 4. Some retailers may have participated in more than one delivery type, so the count of unique participating firms may be less than the total count by delivery type.

Program Changes

In 2016, the *Home Energy Savings* program was renamed and restructured. *Home Energy Savings* is now marketed as the *wattsmart Homes* program. In addition, the *New Homes* program, Schedule 110, was canceled and consolidated under the *wattsmart Homes* program effective December 1, 2016. Also effective December 1, 2016, new offerings for smart thermostats were added and incentives for CFL bulbs and fixtures were retired. Effective January 1, 2017 existing offerings with low participation rates and/or high cost were retired:

- Clothes Washers
- Refrigerators

- Freezers
- Air Sealing
- Windows
- Whole Home Upgrade
- Whole-House Ducted Evaporative Coolers
- Best Practice Install and Proper Sizing for Central Air Conditioners
- Duct Sealing
- Duct Sealing with Insulation
- Duct Sealing in New Manufactured Homes

Evaluation

A process and impact evaluation was published for program years 2013-2014. Key findings include:

- High program satisfaction (99%) from non-lighting program participants, with corresponding high satisfaction with their installed measures, contractor and incentive amounts received.
- Non-lighting participants were mainly aware of the program through retailers and bill inserts.
- Overall NTG ratio was 70 percent.
- The program was cost effective over the two-year period, with a UCT of 2.04.

The full evaluation is available on the Company's website at http://www.pacificorp.com/es/dsm/utah.html

Refrigerator Recycling

The *Refrigerator Recycling* program, also known as "*See ya later, refrigerator*®," was designed to decrease electricity use through the voluntary removal and recycling of inefficient refrigerators and freezers. The program was available to residential, business customers and retailers.

On December 4, 2015, the Company filed to suspend the program in Docket No. 15-035-T17 due to the program administrator, JACO Environmental, effectively going out of business. Suspension of the program was granted by the Commission in its order issued December 3, 2015, with an effective date of January 4, 2016.

During December 2015, the Company began an expedited sole source procurement process to contract for remedial or "clean-up" appliance recycling services for customers that had signed up for the program, but were unable to be serviced due to JACO going out of business. A contract with Appliance Recycling Centers of America ("ARCA") was executed December 30, 2015, and customer outreach began in January 2016. ARCA contacted customers who had pick-ups scheduled with JACO that were canceled in late November and December 2015 and, if the customer was still interested, offer the same removal service and incentive. Clean-up services rendered by ARCA were conducted through March 2016.

On February 5, 2016, the Company filed to cancel the program in Docket No. 16-035-T02 due to its inability to administer the program cost effectively. The Commission granted the Company's request to cancel the program in its order issued March 1, 2016, with an effective date of March 6, 2016. Subsequently, the Company did not perform program-level cost effectiveness in this report. However, the costs and benefits are included in the Residential and Portfolio level cost effectiveness analysis.

Customer participation in ARCA's clean-up services for 2016 is provided in Table 20 by measure category.

Table 20
Clean-up Services Participation – Measures (Units)

Measure Categories	Total kWh/Yr Savings @ Site	Total Incentive	Total Quantity
Freezers	26,271	$ 810.00	27
Refrigerators	127,920	$ 3,120.00	104
Grand Total	**154,191**	**$ 3,930.00**	**131**

Evaluation

A process and impact evaluation was published for program years 2013-2014. Key findings include:

- Achieved 25,358,644 kWh evaluated gross savings; 98% of reported gross savings.

- Overall NTG was 44%. The program evaluation found high freeridership levels due to 43% of respondents claiming they would have disposed of their unit without the program.
- High program satisfaction.
- Participants learned of the program primarily through bill inserts, television, word-of-mouth, and the website.

The results of the evaluation can be viewed at http://www.pacificorp.com/es/dsm/utah.html.

New Homes

The *New Homes* program provided incentives for new homes and multi-family units meeting the specific energy efficiency requirements as outlined in the program's tariff. The *New Homes* program has shown success in helping improve building practices in Utah. To be eligible for program incentives, a home must have installed qualifying stand-alone measures, or a residence must meet the minimum standards and certifications set by the program.

The program was not cost effective from four of the five tests in 2016. The program has been cancelled. Cost effectiveness results are provided in Table 21.

Table 21
Cost Effectiveness for New Homes

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	0.53	($1,299,467)
TRC	0.48	($1,433,899)
UCT	0.92	($109,382)
PCT	1.29	$1,085,410
RIM	0.35	($2,445,872)

Program participation results for 2016 are provided in Table 22 below.

Table 22
New Homes Program Participation

Single Family Measures	Total KWh Saving @ Site	Total Incentives	Total Quantity
High Performance ENERGY STAR Home: Single Family - UT	5,015	$2,500	5
ENERGY STAR Home: Single Family - UT	354,349	$174,750	695
80% ENERGY STAR lighting - Small Home: Single Family - UT	110,619	$9,640	241
80% ENERGY STAR lighting - Medium Home: Single Family - UT	530,005	$47,820	797
80% ENERGY STAR lighting - Large Home: Single Family - UT	382,096	$45,760	572
60% ENERGY STAR lighting - Small Home: Single Family - UT	10,168	$775	31
60% ENERGY STAR lighting - Medium Home: Single Family - UT	76,950	$7,290	162
60% ENERGY STAR lighting - Large Home: Single Family - UT	62,010	$8,450	130
95% AFUE Gas furnace with ECM: Single Family - UT	248,040	$119,250	795
HVAC Quality Installation Contractor Certification: Single Family - UT			
HVAC Quality Installation Rater Certification: Single Family - UT	123,704	$65,800	658
Exterior Wall Upgrade - 2x6 R-20: Single Family - UT	189,441	$97,650	1,953
Geothermal Heat Pump: Single Family - UT	7,052	$3,500	2
High Efficiency Air Conditioning: Single Family - UT	18,357	$8,700	87
Air-Source Heat Pump: Single Family - UT	1,586	$500	2
Above Code Home - Builder Certified: Single Family -UT	165	$125	5
Above Code Home - Rater certified: Single Family - UT	64,258	$42,275	1,691
R-5 Windows: Single Family - UT	75	$24	1
CEE Tier 3 Refrigerator: Single Family - UT			
Premium Evaporative Equipment - Ducted: Single Family - UT			
Premium Evaporative Equipment - Non-Ducted: Single Family - UT	1,406	$500	1
Total for Single Family	**2,185,296**	**$635,309**	**7,828**

Multi Family Measure	Total KWh Saving @ Site	Total Incentives	Total Quantity
High Performance ENERGY STAR Home: Multifamily - UT			
ENERGY STAR Home: Multifamily - UT	210,192	$104,400	696
80% ENERGY STAR lighting - Small Home: Multifamily - UT	221,676	$22,620	1,131
80% ENERGY STAR lighting - Medium Home: Multifamily - UT	388,362	$30,420	1,014
80% ENERGY STAR lighting - Large Home: Multifamily - UT	45,236	$3,440	86
60% ENERGY STAR lighting - Small Home: Multifamily - UT	5,600	$600	40
60% ENERGY STAR lighting - Medium Home: Multifamily - UT	42,588	$3,120	156
60% ENERGY STAR lighting - Large Home: Multifamily - UT	19,552	$1,560	52
95% AFUE Gas furnace with ECM: Multifamily - UT	8,736	$4,200	28
HVAC Quality Installation Contractor Certification: Multifamily - UT			
HVAC Quality Installation Rater Certification: Multifamily - UT	60,514	$38,300	766
Exterior Wall Upgrade - 2x6 R-20: Multifamily - UT	20,741	$11,852	2,963
Geothermal Heat Pump: Multifamily - UT			
High Efficiency Air Conditioning: Multifamily - UT	3,708	$2,700	36
Air-Source Heat Pump: Multifamily - UT			
Above Code Home - Builder Certified: Multifamily - UT			
Above Code Home - Rater certified: Multifamily - UT	78,750	$46,875	1,875
CEE Tier 3 Refrigerator: Multiamily - UT			
Premium Evaporative Equipment - Ducted: Multifamily - UT			
Premium Evaporative Equipment - Non-Ducted: Multifamily - UT			
Total for Multi Family	**1,105,655**	**$270,087**	**8,843**
Grand Total for Single and Multi Family	**3,290,951**	**$905,396**	**16,671**

Program Management

The program manager responsible for the *New Homes* program in Utah is also responsible for new home services found in the *Home Energy Savings* program in Utah, Idaho and Wyoming. For each program and in each state the program manager is responsible for the cost effectiveness of the program, identifying and contracting with the program administrator through a competitive bid process, establishing and monitoring program performance and compliance, and recommending changes in the terms and conditions set in each state's compliance requirements.

Program Administration

The *New Homes* program was administered by Nexant, Inc. ("Nexant"). Nexant's services include design, implementation and evaluation of commercial, industrial, and residential energy efficiency program in the United States. The Company contracts with Nexant to provide coordination and application processing services for the *New Homes* program. Specifically, Nexant is responsible for the following:

- Builder and trade ally engagement – Identifies, recruits, supports and assists builders and their sub-contractors to increase energy efficiency standards in new residential construction.
- Incentive processing and administrative support – Handles incoming inquiries as assigned, processes incentive applications, provide program design services, evaluation and regulatory support upon request.
- Inspections – Verifies on an on-going basis the installation of measures. Summary of the inspection process is in Appendix 3.
- Program specific customer communication and outreach.

The program administrator contract for *New Homes* expired at the end of 2016. The program was transitioned to CLEAResult effective December 1, 2016.

Infrastructure

The program processed 16,671 measures in 5,973 homes in 2016. In addition, the program provided training sessions and promotional support including:

- Program staff participated on the board of directors of the Salt Lake Home Builder Associations and Utah State Home Builders Association.
- Quarterly meetings with home raters.

Program Changes

In 2016, the *New Homes* program was canceled under Schedule 110 and consolidated under the *wattsmart Homes* program, Schedule 111, effective December 1, 2016. The new program includes the following stand-alone measures:

- Central Air Conditioner, $\geq$ 15 SEER
- Gas Furnace, $\geq$ 95% AFUE with ECM

The new qualification for whole home performance is based on a Home Energy Rating System (HERS), a scoring system for home efficiency. The system is based on a software analysis of home plans that takes into consideration all details of the home such as orientation, insulation values, window to wall ratio, HVAC efficiency, water heating efficiency, envelope tightness, duct leakage, and lighting efficiency. This program design allows builders flexibility in reaching measure compliance and all incentive applications are submitted by trained HERS raters, which reduces administrative costs when compared to the previous program design of all stand-alone measures.

Evaluation

A process and impact evaluation for program years 2013 – 2014 was published in 2016. Key findings include:

- High freeridership levels for stand alone measures (52%).
- High program satisfaction amongst active participating builders and home energy raters.
- The program administrator, Nexant, reports that the primary barrier to attracting builders to participate is persuading them to build their homes differently and more efficiently.
- According to the nonparticipant homeowner surveys, the average nonparticipant new home had energy efficient lighting installed in 68% of available sockets, and one-half of these homes had energy efficient lighting installed in at least 80% of available sockets.

The results of the evaluation can be viewed at http://www.pacificorp.com/es/dsm/utah.html.

Home Energy Reports

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's cost effectiveness is provided in Table 23.

Table 23
Cost Effectiveness for Home Energy Reports

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.13	$359,711
TRC	1.03	$76,242
UCT	1.03	$76,242
PCT	N/A	N/A
RIM	0.34	($5,498,773)

In 2016, the program achieved total savings at site of 49,244,502 kWh; 24,433,796 kWh for the legacy group, 22,871,929 kWh for the expansion group and 1,938,777 kWh from the refill group. The "legacy" group is defined as the 2012 initial participant wave, the "expansion" group is defined as the 2014 participant expansion wave and the "refill" group is defined as the additional customers added in August 2016.

Reports were initially provided to approximately 95,000 customers in the legacy group and an additional 220,000 customers were added to the expansion group. In order to address customer attrition, a refill wave of 39,000 customers was added in August 2016. The number of participant's decreased over time due to customer attrition related to general customer churn (customer move-outs) and customers requesting to be removed from the program. To date, only 1.9% of customers have requested to be removed from the program. As of December 2016, 267,084 customers were active recipients of Home Energy Reports. In 2016, 343 customers opted out of the program. Total savings and participation by group is provided in Table 24.

Table 24
Savings and Participation for Home Energy Reports

	Legacy	Expansion	Refill	Total
2016 Savings kWh	24,433,796	22,871,929	1,938,777	49,244,502
Dec. 2016 Participation	68,615	161,423	37,046	267,084

All participating customers may request an electronic version delivered via email and have access to a web portal containing the same information about their usage provided in the report. In addition, all Utah residential customers have access to a 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), understand annual usage, see how weather impacts usage, and suggestions on more ways to save energy around their home.

Program Management

The program manager responsible for the *Home Energy Reports* program in Utah is also responsible for the program in Idaho and Wyoming, the *Irrigation Load Control* in Utah and Idaho, and the *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 recommending changes in the terms and conditions set in each state's compliance requirements.

Program Administration

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

Oracle is responsible for the following:

- Selecting Qualifying Customers – Oracle conducts an analysis to identify qualifying customers that are then randomly selected into the program's treatment (those who will receive reports) and control groups (for measurement and verification).
- Customer Comparison Analysis – Oracle conducts statistical analysis to perform pattern recognition in order to derive actionable insights to selected customers. Oracle uses information about customers' homes (e.g., size, heat type, home type) to find similar homes for comparison.
- Energy Report Delivery – By mail or email.
- Web Portal Design and Support – Oracle operates and maintains a customer Web portal that participants may visit for additional information about their energy usage and saving opportunities, including an online home energy audit.

Evaluation

A process and impact evaluation for program years 2014 – 2015 was published in 2016. Both the legacy and expansion waves were evaluated. The primary objective of the evaluation report was to determine the extent to which participants in the *Home Energy Reports* program reduced their energy consumption due to the program. Secondary objectives were to report on customer

satisfaction with the program, and on behavioral and information effects of the program. Key findings from the evaluation include:

- Savings remained relatively stable across the two years for the Legacy Wave. Expansion Wave reflect the start of this wave in late 2014 and ramp-up into 2015.
- Savings has leveled off for the Legacy Wave since its inception in 2012. This is common for a mature program. The Expansion Wave demonstrates increasing savings over time as is frequently found with newer waves.
- Total double-counted savings was 0.16% of total savings for SYLR and HES programs which means treatment customers were slightly less likely than control customers to participate in other RMP energy efficiency program, thus, double-counting of energy savings does not appear to be a concern. Additionally, Navigant found no evidence of double-counting in the HES upstream lighting program.
- The program was cost effective across all years with the exception of the RIM test.
- Legacy Wave reported lower satisfaction with HER (54%) compared to Expansion Wave (71%). Legacy group had less confidence that the reports were accurate and cited neighbor comparisons as the least valuable component. It is common with HER programs that higher average usage participants report lower overall satisfaction.

The results of the evaluation can be viewed at http://www.pacificorp.com/es/dsm/utah.html.

Low Income Weatherization

The *Low Income Weatherization* program provides energy efficiency services to income-eligible households through a partnership with the Utah Department of Workforce Services, Housing and Community Development Division ("HCD"). Services are at no cost to the program participants.

In 2016, the program achieved savings at site of 210,154 kWh and served 332 homes. The measures installed through the *Low Income Weatherization* program are limited to those that reduce electricity use in participant's homes. The majority of homes served are not electrically heated and do not have electric water heaters. Therefore, most of the Company funds cover lighting and refrigerator replacement costs.

Cost effectiveness results for 2016 are provided in Table 25.

Table 25
Cost Effectiveness for *Low Income Weatherization*

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.66	$38,906
TRC	1.51	$29,974
UCT	1.51	$29,974
PCT	N/A	N/A
RIM	0.41	($127,437)

Total savings, measure type and the corresponding numbers of homes that installed the measure type are provided in Table 26.

Table 26
Total Savings, Homes Served and Measure Counts

Total kWh Savings @ Site	210,154
Participation – Total number of Homes Served	332
Measure Type Installed in Each Home	**#**
Ceiling Insulation	4
Duct Sealing	1
Furnace Fans	116
Compact Fluorescent Light Bulbs	282
Refrigerator Testing on Models not Replaced	49
Refrigerator Replacements	43
Energy Education	3
Light Emitting Diode Light Bulbs	6
Window Replacement	3

Program Management

The program manager responsible for the *Low Income Weatherization* program in Utah is also responsible for the *Low Income Weatherization* program in California, Idaho, Washington and Wyoming; energy assistance programs in Utah, California, Idaho, Oregon, Washington and Wyoming; and bill discount programs in Utah, California and Washington. The program manager is responsible for the cost effectiveness of the weatherization program in each state, partnerships and agreements in place with 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 currently has a contract in place with HCD to provide services through the *Low Income Weatherization* program. The state agency receives federal funds and subcontracts with seven non-profit agencies that install energy efficiency measures in the homes of income eligible households throughout the Company's service area. Company funding of 50 percent of the cost of approved measures is leveraged by HCD with the federal funding they receive, allowing more homes to be served each year.

By contract with the Company, HCD and their subcontracting local agencies are responsible for the following:

- Income Verification – The local agencies determine if participants are income eligible based on HCD guidelines. Household's interested in obtaining weatherization services apply through the agencies. The current income guidelines can be viewed at www.benefits.gov/benefits/benefit-details/1884.
- 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. HCD also inspects a random sample of homes. See Appendix 3 for verification summary.
- Billing Notification – HCD is required to submit a billing to Company within 60 days after job completion. They include a form indicating the measures installed and associated cost on each completed home along with their invoice.

Program Changes

Effective March 1, 2016, LEDs were added to the list of efficiency measures eligible for funding.

Evaluation

The Company initiated a process and impact evaluation for program years 2013 – 2015 by Opinion Dynamics. The evaluation is anticipated to be published in 2017.

NON-RESIDENTIAL ENERGY EFFICIENCY

The *Non-Residential Energy Efficiency* program is promoted to the Company's customers as *watt*smart Business. The *watt*smart Business program is intended to maximize the efficient utilization of electricity for new and existing non-residential customers through the installation of energy efficiency measures and energy management protocols. Qualifying measures are any measures which, when implemented in an eligible facility, result in verifiable electric energy efficiency improvements.

Total non-residential program savings at site increased 74 percent from 2015, from 120,368,311 kWh in 2015 to 209,941,939 kWh in 2016. Energy savings from the commercial sector had the largest savings increase.

The program was cost effective from every test perspective except the RIM. Cost effectiveness results for 2016 are provided in Table 27.

Table 27
Cost Effectiveness for Non-Residential Energy Efficiency

Benefit/Cost Test	Benefit/Cost Ratio	Net Benefits
PTRC	1.76	$49,030,247
TRC	1.60	$38,676,836
UCT	2.76	$66,033,394
PCT	2.22	$86,262,581
RIM	0.76	($32,871,138)

Total incentives, savings and completed projects are provided in Table 28 by customer sector.

Table 28
Participation by Sector

Project Sector	Total kWh Savings @ Site	Cash Incentive	Bill Credits	Total # of Projects
Agricultural	10,851,979	$1,092,703		47
Commercial	133,500,517	$15,772,961	$1,360,288	3910
Industrial	65,589,443	$6,419,090	$2,110,112	339
Grand Total	**209,941,939**	**$23,284,754**	**$3,470,400**	**4,296**

Services offered through the 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: Provides enhanced incentives and direct installation of lighting retrofits to qualified small business customers (Note: this offer was suspended in July 2015 due to over participation and was re-launched in September 2016).
- 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 energy savings of a minimum of 1,000,000 kWh/year.
- Midstream/LED instant incentive: Provides instant, point-of-purchase incentive for LED lamps and retrofit kits sold through qualifying participating distributors. Customers purchasing lamps from non-participating suppliers can apply for incentives after purchase.

Total savings, projects and incentives by measure category are provided in Table 29 below.

Table 29
Participation by Measure Category

Measure Categories	Total kWh/Yr Savings	Cash Incentive	Bill Credit	Total kW/Yr Savings	Total # of Projects
Additional Measures	6,679,791	$ 811,710	$ -	356	16
Building Shell	1,667,897	$ 529,533	$ -	666	169
Compressed Air	4,587,664	$ 582,506	$ 75,030	255	35
Direct Install	588,199	$ 168,812		1,728	97
Electronics	721,675	$ 40,225	$ -	140	3
Energy Management	20,149,968	$ 402,999	$ -	1,421	57
Energy Manager Co-Funding	-	$ 476,366	$ -	-	7
Farm & Dairy	67,050	$ 3,950	$ -	9	2
Food Service Equipment	5,978,926	$ 610,055	$ -	875	133
HVAC	18,665,056	$ 2,469,514	$ 118,585	3,396	230
Irrigation	761,772	$ 91,872	$ -	200	34
Lighting	128,241,826	$ 14,597,776	$ 2,975,645	16,553	3,399
Motors	18,013,297	$ 1,998,155	$ 283,306	1,880	101
Refrigeration	3,818,818	$ 501,282	$ 17,833	321	13
Grand Total	**209,941,939**	**$ 23,284,754**	**$ 3,470,400**	**27,800**	**4,296**

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.

Contracted DSM Delivery

The contracted DSM delivery channel generally targets typical opportunities which serves small to medium sized business customers and, to a lesser extent, large business customers. Administration is provided through Company contracts outlined below by contractor and associated tasks:

- Nexant, Inc. ("Nexant") manages trade ally coordination, midstream incentives, trade ally training and application processing services for commercial measures.
- Cascade Energy ("Cascade") manages trade ally coordination, midstream incentives, trade ally training and application processing services for industrial and agricultural measures.
- Willdan Energy Solutions ("Willdan") manages coordination, outreach training and application processing services for the small business direct installation offering.

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 the following:

- Small business engagement - includes identification, outreach, assessing/auditing, installing and inspecting installation of energy efficient equipment at qualifying business customer facilities.
- Administrative support – includes handling incoming inquiries as assigned, processing 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 30.
- Manage engineering firms to ensure program compliance, quality of work and customer satisfaction.
- Manage *watt*smart Business projects through the entire project lifecycle.

The contracts for the outsourced delivery channel expired June 30, 2016. Following a competitive bid process, these contracts were awarded to Nexant and Cascade for another 3-year term. A third contract, awarded to Willdan, will administer the Small Business Direct Installation offer within the *watt*smart Business Program. Additional information is included in the Program Changes section.

Infrastructure

Contracted DSM Delivery

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, motors/VFDs, and irrigation. This work includes identifying and recruiting trade allies, providing program and technical training and providing sales support on an ongoing basis. The current list of the trade allies who have applied and been approved as participating vendors are posted on the Company website and is included as Appendix 5 to this report. In most cases, customers are not required to select a vendor from these lists to receive an incentive[23].

The current counts of participating trade allies by technology are in Table 30 below.

Table 30
Participating Trade Allies[24]

Lighting	HVAC	Motors and VFD
173	75	91

[23] Customers receiving Small Business Lighting incentives are required to use an approved contractor selected from a competitive request for bid process.
[24] Some trade allies may participate in more than one technology. Therefore, the count of unique participating firms is less than the total count provided above.

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. Each customer's project is directly managed by one of the Company's in-house project managers. The project manager works directly with the customer or through the appropriate Company regional business manager located in Utah.

On October 31, 2016 the contracts for engineering firms providing these services expired. Consequently, the Company initiated a request for proposals in early 2016 to obtain contracts with qualified firms to provide these services to customers. Twelve firms were selected. Table 31 lists the engineering firms under contract with the Company both before this bid cycle and afterward.

Table 31
Energy Engineering Firms

Engineering Firm	Main Office Location	Contracted prior to 10/31/16	Contracted after 11/01/16
Abacus Resource Management Company	Beaverton, OR	X	
Brendle Group	Fort Collins, CO	X	X
Cascade Energy Engineering	Cedar Hills, UT	X	X
Compression Engineering Corp	Salt Lake City, UT	X	
Ecova	Portland, OR	X	
EMP2, Inc	Richland, VA	X	X
Energy Resource Integration, LLC	Sausalito, CA	X	X
Energy and Resource Solutions	North Andover, MA	X	
EnerNOC Inc.	Portland, OR	X	
EnSave, Incorporated	Richmond, VT	X	X
ETC Group, Incorporated	Salt Lake City, UT	X	X
Evergreen Consulting Group	Beaverton, OR	X	X
Fazio Engineering	Weston, OR	X	
kW Engineering, Inc.	Salt Lake City, UT	X	X
Lincus Incorporated	Tempe, AZ	X	
Nexant, Incorporated	Salt Lake City, UT	X	X
QEI Energy Management, Inc.	Beaverton, OR	X	
RM Energy Consulting	Pleasant Grove, UT	X	X
Rick Rumsey, LLC	Ammon, ID	X	X
SBW Consulting, Inc.	Bellevue, WA	X	
Solarc Architecture & Engineering, Inc.	Eugene, OR	X	X
Triple Point Energy	Portland, OR	X	

Program Changes

Several notable changes occurred within the *watt*smart Business Program in 2016 that targeted the small business sector and lighting. These changes include the redesign of the Small Business Lighting offer to the Small Business Direct Installation offer, and a restructuring of LED lighting incentives.

Small Business Lighting was restructured to Small Business Direct Installation. The program change was designed to expand the program offering from lighting to additional energy efficient measures. The intent is to benefit the small business market segment through offering an incentive, in the form of a direct installation of energy efficient measures, by a certified and/or licensed contractor. This program will target specific geographical areas and is intended to include energy audits of customers' facilities identifying qualifying energy savings measures that could be installed, and the associated costs. Project proposals based on completed audits will be provided that fit within customers' operational and budgetary parameters. Customers can then choose to move forward with the entire project installing all qualifying upgrades, or select a portion of qualifying upgrades from the project proposal. Depending on the size and demographics of each area, the following tactics may be used to engage with Small Business customers:

- Direct customer events,
- Community fairs, street fairs, and "Main Street" events,
- Geo-targeted pop-up events and workshops
- City Council and Chamber of Commerce Meetings,
- Trade/Business Association Events,
- Door to door (in person and print)
- Digital (website), and
- Direct-mail, email blasts or print media.

The newly designed Small Business Direct Install offer is structured to increase participation, particularly in rural communities where program participation has historically been lower than urban communities. As mentioned in the Program Administration section, a new outsourced delivery contractor, Willdan, will administer this program.

The Company also restructured LED lighting. 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, and 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 website. The Company moved away from incenting lighting in technology-specific categories and transitioned to a true pay-for-savings approach. Under the new incentive structure interior, exterior and street/pole lighting are all incentivized at a specific cost per kWh saved, regardless of what

type of technology is installed. Lighting incentives were also lowered proportionately due to decreasing costs for LED technology.

Evaluation

The Strategic Energy Management component of *watt*smart Business was evaluated. The report was published in 2016 and evaluated two projects over the 2014 – 2015 program years. Key findings include:

- Necessary framework exists.
- Refine vetting of potential participants.
- Older billing system does not support automated data collection and reporting.
- Not cost effective for smaller customers with less savings.

The *watt*smart Business program evaluation for program years 2014-2015 was in progress during 2016. It was published in early 2017.

The results of the evaluation can be viewed at http://www.pacificorp.com/es/dsm/utah.html.

COMMUNICATIONS, OUTREACH AND EDUCATION

*watts*mart is an overarching energy efficiency campaign with the overall goal to engage customers in reducing their energy usage through behavioral changes, and pointing them to the programs and information to assist them. "Rocky Mountain Power wants to help you save energy and money" is the key message, and the Company utilizes earned media, customer communications, education and outreach, advertising and program specific marketing 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 programs, services and incentives.

A summary of 2016 (Year 7) "Utah Demand-side Management Outreach and Communications Campaign" is included in Appendix 7.

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, 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 and associated documentation through review of documentation, surveys and/or ongoing onsite inspections.

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

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

Information on evaluation activities completed or in progress during 2016 is summarized in the chart below. A summary of the recommendations are provided in Appendix 6. The evaluation report is available at www.pacificorp.com/es/dsm/utah.html

Program	Years Evaluated	Evaluator	Progress Status
Home Energy Savings	2013 – 2014	Cadmus	Completed
Home Energy Reports	8/1/2012 - 1/31/2014	Navigant	Completed
New Homes	2013 - 2014	Cadmus	Completed
Refrigerator Recycling	2013 - 2014	Cadmus	Completed
Strategic Energy Management	2014 - 2015	Cadmus	Completed
*watt*smart Business	2014 - 2015	Cadmus	Completed in 2017
Home Energy Savings	2015 - 2016	Cadmus	In Progress
Low Income Weatherization	2013 - 2015	Opinion Dynamics	In Progress

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Appendix 1

Report Requirements

Report requirements were revised and approved pursuant to the Commission's Order issued February 16, 2017, in Docket No. 17-035-04, effective February 17, 2017.

Requirement No.	Description	Report Reference
1.	The Company will file the Annual Report between May 1 and June 1.	Filed May 15, 2017
2.	The Company shall report Class 1 capacity reduction, estimated Class 2 megawatt savings during system peak, and Class 2 megawatt-hour savings achieved, all compared against the Integrated Resource Plan targets and forecast targets submitted in the applicable DSM November 1st Deferred Account and Forecast Report.[1]	Table 2, Page 7
3.	In the executive summary, include the lifetime megawatt-hour savings in addition to first year megawatt-hour savings.	Page 5
4.	The Company shall clearly state for each program and measure whether all reported savings are ex-post or ex-ante.	Pg. 5, footnote 2; pg. 8, footnote 13; pg. 21
5.	The Company shall accurately and clearly report all cost effectiveness test results at the portfolio and sector level in addition to the program and measure category levels.	Appendix 2
6.	The Company shall perform cost effectiveness tests using avoided costs from planned assumptions.	Appendix 2
7.	The Company shall provide cost effectiveness results with associated decrement values and program expenditures for the year's performance of the Company's Class 1 programs, subject to the confidentiality requirements of Utah Administrative Code R746-100-16.	Confidential Appendix 8
8.	For Class 1 programs, capacity reduction will be reported in megawatts.	Tables 2, 3, and Peak Reduction section
9.	The Company shall provide Class 1 program data regarding loads available for curtailment, actual curtailment achieved, and program expenditures.	Peak Reduction section
10.	The Company shall include published evaluations that have not previously been provided in an Annual Report, and also include a schedule of current and upcoming evaluations.	Evaluation section
11.	The Company shall submit process and impact evaluation and annual reporting costs at the sector level for the cost effectiveness tests.	N/A for 2016 Report

[1] Pursuant to the Phase I Stipulation filed August 3, 2009, in Docket No. 09-035-T08, and approved in the order dated August 25, 2009, in the same, the Company must provide a forecast of expenditures for approved programs and their acquisition targets for the next calendar year by November 1st of each year.

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Appendix 2

Utah Cost Effectiveness

NAVIGANT

Utah Portfolio Level

Navigant estimated the cost-effectiveness for the overall energy efficiency portfolio and component sectors, based on 2016 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

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Commercial Line Loss	8.71%
Industrial Line Loss	5.85%
Irrigation Line Loss	9.24%
Residential Energy Rate ($/kWh)	$0.1111
Commercial Energy Rate ($/kWh)	$0.0852
Industrial Energy Rate ($/kWh)	$0.0605
Irrigation Energy Rate ($/kWh)	$0.0778
Inflation Rate[1]	1.9%

[1] Future rates determined using a 1.9% annual escalator.

Table 2 – Portfolio Level Costs 2016

Expense	Cost
Outreach & Communications Campaign	$1,317,861
Portfolio Technical Reference Library	$26,223
Portfolio Potential Study	$58,754
Portfolio Training	$36,588
DSM Central	$125,051
Total Costs	**$1,564,477**

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Table 3 – Benefit/Cost Ratios by Portfolio Type

Measure Group	PTRC	TRC	UCT	RIM	PCT
DSM Portfolio with Load Control Programs	1.89	1.72	1.94	0.89	2.61
Total Energy Efficiency Portfolio	1.75	1.60	2.60	0.73	2.40
C&I Programs	1.76	1.60	2.76	0.76	2.22
Residential Programs	1.87	1.70	2.48	0.68	2.96
Load Control Programs	PASS	PASS	PASS	PASS	n/a

Table 4 – 2016 DSM Portfolio with Load Control Programs Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	n/a	$134,221,176	$253,691,255	$119,470,080	1.89
Total Resource Cost Test (TRC) No Adder	n/a	$134,221,176	$230,628,414	$96,407,238	1.72
Utility Cost Test (UCT)	n/a	$118,631,986	$230,628,414	$111,996,428	1.94
Rate Impact Test (RIM)		$259,499,444	$230,628,414	-$28,871,030	0.89
Participant Cost Test (PCT)		$93,055,904	$242,539,177	$149,483,273	2.61
Lifecycle Revenue Impacts ($/kWh)					$0.0001047011

Table 5 - 2016 Total 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	$0.0519	$89,743,923	$157,486,678	$67,742,755	1.75
Total Resource Cost Test (TRC) No Adder	$0.0519	$89,743,923	$143,169,707	$53,425,784	1.60
Utility Cost Test (UCT)	$0.0318	$55,042,068	$143,169,707	$88,127,639	2.60
Rate Impact Test (RIM)		$195,909,526	$143,169,707	-$52,739,819	0.73
Participant Cost Test (PCT)		$93,055,904	$223,426,512	$130,370,608	2.40
Lifecycle Revenue Impacts ($/kWh)					$0.0001912614

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Table 6 – 2016 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	$0.0471	$64,857,269	$113,887,516	$49,030,247	1.76
Total Resource Cost Test (TRC) No Adder	$0.0471	$64,857,269	$103,534,105	$38,676,836	1.60
Utility Cost Test (UCT)	$0.0272	$37,500,712	$103,534,105	$66,033,394	2.76
Rate Impact Test (RIM)		$136,405,244	$103,534,105	-$32,871,138	0.76
Participant Cost Test (PCT)		$70,572,824	$156,835,404	$86,262,581	2.22
Lifecycle Revenue Impacts ($/kWh)					$0.0001094324

Table 7 – 2016 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	$0.0662	$23,322,177	$43,599,162	$20,276,985	1.87
Total Resource Cost Test (TRC) No Adder	$0.0662	$23,322,177	$39,635,601	$16,313,425	1.70
Utility Cost Test (UCT)	$0.0453	$15,976,879	$39,635,601	$23,658,723	2.48
Rate Impact Test (RIM)		$57,939,806	$39,635,601	-$18,304,204	0.68
Participant Cost Test (PCT)		$22,483,080	$66,591,108	$44,108,028	2.96
Lifecycle Revenue Impacts ($/kWh)					$0.0001039341

NAVIGANT

Utah Home Energy Savings Program

Navigant estimated the cost-effectiveness results for the Utah Home Energy Savings Program, based on 2016 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 7 measure categories.

Cost-effectiveness was tested using the 2015 IRP east residential whole house 31%, east residential lighting 47%, east plug loads 71%, east residential cooling 9% and east residential water heating 53% load factor decrements. The program passes the cost-effectiveness for all the tests except the RIM test. The memo consists of the following tables.

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Table 1 - Home Energy Savings Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate ($/kWh)	$0.1111
Inflation Rate[1]	1.9%

[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	$3,617	$185,006	$2,744	$246,666	$438,032	$1,043,807
Building Shell	$0	$5,898	$301,692	$4,474	$595,717	$907,781	$2,854,272
Energy Kits - DHW	$0	$713	$21,240	$541	$5,913	$28,407	$6,552
Energy Kits - Lighting	$0	$471	$14,037	$357	$14,424	$29,289	$17,687
HVAC	$0	$56,467	$2,888,137	$42,830	$3,789,346	$6,776,780	$435,750
Lighting	$0	$185,713	$998,815	$140,865	$2,164,762	$3,490,154	$14,347,220
Water Heating	$0	$84	$4,305	$64	$7,000	$11,453	$15,396
Total	**$0**	**$252,964**	**$4,413,231**	**$191,875**	**$6,823,828**	**$11,681,897**	**$18,720,683**
Credit - Incentive	-	-	-	-	-$1,886	-	-
Total	**$0**	**$252,964**	**$4,413,231**	**$191,875**	**$6,821,942**	**$11,680,011**	**$18,720,683**

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	652,823	100%	652,823	81%	528,787	14
Building Shell	1,064,568	100%	1,064,568	100%	1,064,568	30
Energy Kits - DHW	128,689	100%	128,689	78%	100,377	10
Energy Kits - Lighting	85,048	100%	85,048	78%	66,337	10
HVAC	10,191,265	100%	10,191,265	83%	8,458,750	16
Lighting	33,518,040	91%	30,501,416	61%	18,605,864	12
Water Heating	15,191	100%	15,191	81%	12,305	15
Total	**45,655,623**	**93%**	**42,638,999**	**68%**	**28,836,987**	**13**

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Appliances	0.30	0.28	0.65	0.27	0.99
Building Shell	0.57	0.52	1.81	0.56	0.91
Energy Kits - DHW	1.83	1.67	1.62	0.38	19.17
Energy Kits - Lighting	1.32	1.20	1.18	0.38	5.29
HVAC	7.24	6.58	3.25	1.23	39.45
Lighting	1.23	1.12	3.24	0.48	2.43
Water Heating	0.52	0.47	0.70	0.30	1.70
Total	**2.20**	**2.00**	**3.03**	**0.78**	**2.98**

Table 5 – Home Energy Savings Program Level Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0623	$17,700,793	$38,883,484	$21,182,692	2.20
Total Resource Cost Test (TRC) No Adder	$0.0623	$17,700,793	$35,348,622	$17,647,829	2.00
Utility Cost Test (UCT)	$0.0411	$11,680,011	$35,348,622	$23,668,611	3.03
Rate Impact Test (RIM)		$45,529,083	$35,348,622	-$10,180,461	0.78
Participant Cost Test (PCT)		$18,720,683	$55,875,539	$37,154,856	2.98
Lifecycle Revenue Impacts ($/kWh)					$0.0000313290
Discounted Participant Payback (years)					n/a

Table 6 through Table 12 provides cost-effectiveness results for all 7 measures.

Table 6 - Home Energy Savings Appliance Cost-Effectiveness Results (Decrement - East Plug Load- 71%, Load Shape – Plug Loads)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1951	$1,036,850	$314,206	-$722,644	0.30
Total Resource Cost Test (TRC) No Adder	$0.1951	$1,036,850	$285,642	-$751,208	0.28
Utility Cost Test (UCT)	$0.0824	$438,032	$285,642	-$152,390	0.65
Rate Impact Test (RIM)		$1,071,535	$285,642	-$785,893	0.27
Participant Cost Test (PCT)		$1,043,807	$1,028,768	-$15,039	n/a
Lifecycle Revenue Impacts ($/kWh)					$0.0000022496
Discounted Participant Payback (years)					n/a

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1882	$3,166,336	$1,802,970	-$1,363,366	0.57
Total Resource Cost Test (TRC) No Adder	$0.1882	$3,166,336	$1,639,063	-$1,527,272	0.52
Utility Cost Test (UCT)	$0.0540	$907,781	$1,639,063	$731,282	1.81
Rate Impact Test (RIM)		$2,921,866	$1,639,063	-$1,282,803	0.56
Participant Cost Test (PCT)		$2,854,272	$2,609,802	-$244,470	0.91
Lifecycle Revenue Impacts ($/kWh)					$0.0000017446
Discounted Participant Payback (years)					n/a

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0352	$27,604	$50,577	$22,973	1.83
Total Resource Cost Test (TRC) No Adder	$0.0352	$27,604	$45,979	$18,375	1.67
Utility Cost Test (UCT)	$0.0362	$28,407	$45,979	$17,572	1.62
Rate Impact Test (RIM)		$121,738	$45,979	-$75,759	0.38
Participant Cost Test (PCT)		$6,552	$125,569	$119,017	19.17
Lifecycle Revenue Impacts ($/kWh)					$0.0000003018
Discounted Participant Payback (years)					0.06

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0553	$28,661	$37,914	$9,253	1.32
Total Resource Cost Test (TRC) No Adder	$0.0553	$28,661	$34,468	$5,806	1.20
Utility Cost Test (UCT)	$0.0565	$29,289	$34,468	$5,179	1.18
Rate Impact Test (RIM)		$90,970	$34,468	-$56,502	0.38
Participant Cost Test (PCT)		$17,687	$93,501	$75,814	5.29
Lifecycle Revenue Impacts ($/kWh)					$0.0000002251
Discounted Participant Payback (years)					0.43

Table 10 - Home Energy Savings HVAC Cost-Effectiveness Results
(Decrement - East Residential Cooling - 9%, Load Shape – Cooling)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0359	$3,349,107	$24,243,197	$20,894,090	7.24
Total Resource Cost Test (TRC) No Adder	$0.0359	$3,349,107	$22,039,270	$18,690,163	6.58
Utility Cost Test (UCT)	$0.0727	$6,776,780	$22,039,270	$15,262,490	3.25
Rate Impact Test (RIM)		$17,898,813	$22,039,270	$4,140,457	1.23
Participant Cost Test (PCT)		$435,750	$17,189,385	$16,753,635	39.45
Lifecycle Revenue Impacts ($/kWh)					-$0.0000104084
Discounted Participant Payback (years)					n/a

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0603	$10,077,196	$12,425,782	$2,348,586	1.23
Total Resource Cost Test (TRC) No Adder	$0.0603	$10,077,196	$11,296,166	$1,218,969	1.12
Utility Cost Test (UCT)	$0.0209	$3,490,154	$11,296,166	$7,806,011	3.24
Rate Impact Test (RIM)		$23,399,118	$11,296,166	-$12,102,952	0.48
Participant Cost Test (PCT)		$14,347,220	$34,802,407	$20,455,187	n/a
Lifecycle Revenue Impacts ($/kWh)					$0.0000402924
Discounted Participant Payback (years)					n/a

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1304	$16,924	$8,838	-$8,086	0.52
Total Resource Cost Test (TRC) No Adder	$0.1304	$16,924	$8,035	-$8,889	0.47
Utility Cost Test (UCT)	$0.0882	$11,453	$8,035	-$3,418	0.70
Rate Impact Test (RIM)		$26,930	$8,035	-$18,895	0.30
Participant Cost Test (PCT)		$15,396	$26,107	$10,711	1.70
Lifecycle Revenue Impacts ($/kWh)					$0.0000000506
Discounted Participant Payback (years)					6.87

NAVIGANT

Utah New Homes Program

Navigant estimated the cost-effectiveness results for the Utah New Homes Program, based on 2016 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 only the PCT cost-effectiveness test.

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Table 1 – New Homes Program Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate ($/kWh)	$0.1111
Inflation Rate[1]	1.9%

[1] Future rates determined using a 1.9% annual escalator.

Table 2 – New Homes Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Total Utility Costs	Gross Customer Costs
New Homes	$0	$20,408	$520,511	$7,631	$905,146	$1,453,696	$3,762,397
Total	**$0**	**$20,408**	**$520,511**	**$7,631**	**$905,146**	**$1,453,696**	**$3,762,397**

Table 3 – New Homes Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
New Homes	3,290,951	100%	3,290,951	59%	1,950,276	14
Total	**3,290,951**	**100%**	**3,290,951**	**59%**	**1,950,276**	**14**

Table 4 - New Homes Program Level Cost-Effectiveness Results
(Decrement - East Residential Whole House - 31%, Load Shape – Whole House)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1417	$2,778,213	$1,478,745	-$1,299,467	0.53
Total Resource Cost Test (TRC) No Adder	$0.1417	$2,778,213	$1,344,314	-$1,433,899	0.48
Utility Cost Test (UCT)	$0.0742	$1,453,696	$1,344,314	-$109,382	0.92
Rate Impact Test (RIM)		$3,790,186	$1,344,314	-$2,445,872	0.35
Participant Cost Test (PCT)		$3,762,397	$4,847,807	$1,085,410	1.29
Lifecycle Revenue Impacts ($/kWh)					$0.0000070012
Discounted Participant Payback (years)					n/a

NAVIGANT

Utah Home Energy Reporting Program

Navigant estimated the cost-effectiveness results for the Utah Home Energy Reporting Program, based on 2016 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.

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Table 1 – Home Energy Reporting Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate ($/kWh)	$0.1111
Inflation Rate[1]	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 Dev.	Incentives	Total Utility Costs	Gross Customer Costs
HER	$0	$42,322	$2,627,845	$88,289	$0	$2,758,456	$0
Total	**$0**	**$42,322**	**$2,627,845**	**$88,289**	**$0**	**$2,758,456**	**$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
HER	49,244,502	100%	49,244,502	100%	49,244,502	1
Total	**49,244,502**	**100%**	**49,244,502**	**100%**	**49,244,502**	**1**

Table 4 – Home Energy Reporting Program Level Cost-Effectiveness Results (Decrement – Residential Whole House - 31%, Load Shape – Whole House)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0587	$2,758,456	$3,118,167	$359,711	1.13
Total Resource Cost Test (TRC) No Adder	$0.0587	$2,758,456	$2,834,697	$76,242	1.03
Utility Cost Test (UCT)	$0.0587	$2,758,456	$2,834,697	$76,242	1.03
Rate Impact Test (RIM)		$8,333,470	$2,834,697	-$5,498,773	0.34
Participant Cost Test (PCT)		$0	$5,575,014	$5,575,014	n/a
Lifecycle Revenue Impacts ($/kWh)					$0.0002167685
Discounted Participant Payback (years)					n/a

NAVIGANT

Utah Low Income Weatherization Program

Navigant estimated the cost-effectiveness results for the Utah Low Income Weatherization Program, based on 2016 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 lighting 47% load factor decrement. The program passes cost-effectiveness for all the tests except RIM and PCT tests.

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Table 1 - Low Income Weatherization Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate ($/kWh)	$0.1111
Inflation Rate[1]	1.9%

[1] Future rates determined using a 1.9% annual escalator.

Table 2 - Low Income Weatherization Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Total Utility Costs	Gross Customer Costs
Low Income Weatherization	$0	$17,586	$2,648	$11,268	$27,837	$59,339	$0
Total	**$0**	**$17,586**	**$2,648**	**$11,268**	**$27,837**	**$59,339**	**$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	210,154	70%	147,108	100%	147,108	12
Total	**210,154**	**70%**	**147,108**	**100%**	**147,108**	**12**

Table 4 - Low Income Weatherization Program Level Cost-Effectiveness Results (Decrement - East Residential Lighting - 47%, Load Shape – Lighting)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0449	$59,339	$98,245	$38,906	1.66
Total Resource Cost Test (TRC) No Adder	$0.0449	$59,339	$89,314	$29,974	1.51
Utility Cost Test (UCT)	$0.0449	$59,339	$89,314	$29,974	1.51
Rate Impact Test (RIM)		$216,750	$89,314	-$127,437	0.41
Participant Cost Test (PCT)		$0	$185,248	$185,248	n/a
Lifecycle Revenue Impacts ($/kWh)					$0.0000004243
Discounted Participant Payback (years)					n/a

NAVIGANT

Utah wattsmart Business Program

Navigant estimated the cost-effectiveness results for the Utah Wattsmart Business Program, based on 2016 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 14 measure categories.

Cost-effectiveness was tested using the 2016 IRP east industrial 40%, east commercial lighting 53%, east commercial cooling 14% and east plug loads 71% load factor decrements. The program passes PTRC, TRC and UCT cost-effectiveness tests. The memo consists of the following tables.

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Table 1 – Utility Inputs

Parameter	Value
Discount Rate	6.66%
Commercial Line Loss	8.71%
Industrial Line Loss	5.85%
Irrigation Line Loss	9.24%
Commercial Energy Rate ($/kWh)	6.10%
Industrial Energy Rate ($/kWh)	$0.0778
Irrigation Energy Rate ($/kWh)	$0.0736
Inflation Rate[1]	1.9%

[1] Future rates determined using a 1.9% annual escalator.

Table 2 – Annual Wattsmart Business Program Costs by Measure Category

Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Bill Credits	Total Utility Costs	Gross Customer Costs
Additional Measures	$231,201	$24,089	$402,115	$23,100	$811,710	$0	$1,492,215	$2,800,317
Building Shell	$57,729	$6,015	$100,405	$5,768	$529,533	$0	$699,450	$1,347,436
Compressed Air	$158,788	$16,544	$276,172	$15,865	$582,506	$75,030	$1,124,905	$1,813,338
Direct Install-Lighting	$0	$2,121	$414,768	$2,034	$168,812	$0	$587,735	$0
Electronics	$24,979	$2,602	$43,444	$2,496	$40,225	$0	$113,746	$97,100
Energy Management	$697,431	$72,665	$1,213,004	$69,681	$402,999	$0	$2,455,780	$508,212
Energy Man. Co-Funding	$0	$0	$0	$0	$476,366	$0	$476,366	$0
Farm & Dairy	$2,321	$242	$4,036	$232	$3,950	$0	$10,781	$41,930
Food Ser. Equip.	$206,943	$21,561	$359,924	$20,676	$610,055	$0	$1,219,159	$1,195,107
HVAC	$646,035	$67,310	$1,123,614	$64,546	$2,469,514	$118,585	$4,489,604	$9,699,989
Irrigation	$26,366	$2,747	$45,858	$2,634	$91,872	$0	$169,477	$245,586
Lighting	$835,972	$462,465	$321,432	$443,478	$14,597,776	$2,975,645	$19,636,768	$46,799,732
Motors	$623,476	$64,959	$1,084,379	$62,293	$1,998,155	$283,306	$4,116,568	$4,593,972
Refrigeration	$132,177	$13,771	$229,888	$13,206	$501,282	$17,833	$908,158	$1,430,104
Total	**$3,643,418**	**$757,091**	**$5,619,039**	**$726,009**	**$23,284,754**	**$3,470,400**	**$37,500,712**	**$70,572,824**

Table 3 – Annual Wattsmart Business Program Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Additional Measures	6,679,791	74%	4,943,045	76%	3,756,714	20
Building Shell	1,667,897	74%	1,234,244	76%	938,025	15
Compressed Air	4,587,664	74%	3,394,871	76%	2,580,102	15
Direct Install-Lighting	588,199	90%	529,379	90%	476,441	12
Electronics	721,675	74%	534,040	76%	405,870	5
Energy Management	20,149,968	84%	16,925,973	76%	12,863,740	3
Energy Manager Co-Funding	0	0%	0	0%	0	0
Farm & Dairy	67,050	81%	54,311	76%	41,276	15
Food Service Equipment	5,978,926	74%	4,424,405	76%	3,362,548	5
HVAC	18,665,056	93%	17,358,502	76%	13,192,462	14
Irrigation	761,772	81%	617,035	76%	468,947	12
Lighting	128,241,826	100%	128,241,826	76%	97,463,788	13
Motors	18,013,297	100%	18,013,297	76%	13,690,106	14
Refrigeration	3,818,818	97%	3,704,253	76%	2,815,233	13
Total	**209,941,939**	**95%**	**199,975,182**	**76%**	**152,055,251**	**12**

Table 4 – Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Additional Measures	1.06	0.96	1.81	0.58	1.77
Building Shell	0.67	0.61	1.03	0.53	1.04
Compressed Air	1.04	0.94	1.55	0.54	1.88
Direct Install-Lighting	0.79	0.72	0.51	0.35	0.00
Electronics	0.50	0.45	0.59	0.32	1.69
Energy Management	0.98	0.89	0.88	0.43	7.45
Energy Manager Co-Funding	0.00	0.00	0.00	0.00	0.00
Farm & Dairy	0.84	0.76	2.74	0.64	1.21
Food Service Equipment	0.82	0.75	0.93	0.48	1.75
HVAC	2.03	1.85	3.82	1.18	1.62
Irrigation	1.75	1.59	2.48	0.94	1.85
Lighting	1.91	1.74	3.33	0.78	2.20
Motors	2.01	1.83	2.36	0.61	3.87
Refrigeration	1.46	1.33	2.16	0.65	2.30
Total	**1.76**	**1.60**	**2.76**	**0.76**	**2.22**

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	$0.0471	$64,857,269	$113,887,516	$49,030,247	1.76
Total Resource Cost Test (TRC) No Adder	$0.0471	$64,857,269	$103,534,105	$38,676,836	1.60
Utility Cost Test (UCT)	$0.0272	$37,500,712	$103,534,105	$66,033,394	2.76
Rate Impact Test (RIM)		$136,405,244	$103,534,105	-$32,871,138	0.76
Participant Cost Test (PCT)		$70,572,824	$156,835,404	$86,262,581	2.22
Lifecycle Revenue Impacts ($/kWh)					$0.0001094324

Table 6 through Table 19 provide cost-effectiveness results for all 14 measures.

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0709	$2,808,746	$2,976,242	$167,496	1.06
Total Resource Cost Test (TRC) No Adder	$0.0709	$2,808,746	$2,705,674	-$103,071	0.96
Utility Cost Test (UCT)	$0.0377	$1,492,215	$2,705,674	$1,213,460	1.81
Rate Impact Test (RIM)		$4,645,605	$2,705,674	-$1,939,931	0.58
Participant Cost Test (PCT)		$2,800,317	$4,960,909	$2,160,592	1.77
Lifecycle Revenue Impacts ($/kWh)					$0.0000039252
Discounted Participant Payback (years)					9.07

Table 7 – Wattsmart Business Building Shell Cost-Effectiveness Results (Decrement – East Industrial - 40%, Load Shape – HVAC)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1198	$1,193,968	$795,684	-$398,285	0.67
Total Resource Cost Test (TRC) No Adder	$0.1198	$1,193,968	$723,349	-$470,620	0.61
Utility Cost Test (UCT)	$0.0702	$699,450	$723,349	$23,899	1.03
Rate Impact Test (RIM)		$1,366,378	$723,349	-$643,029	0.53
Participant Cost Test (PCT)		$1,347,436	$1,407,069	$59,634	1.04
Lifecycle Revenue Impacts ($/kWh)					$0.0000017210
Discounted Participant Payback (years)					20.80

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0712	$1,845,506	$1,913,443	$67,937	1.04
Total Resource Cost Test (TRC) No Adder	$0.0712	$1,845,506	$1,739,493	-$106,013	0.94
Utility Cost Test (UCT)	$0.0434	$1,124,905	$1,739,493	$614,588	1.55
Rate Impact Test (RIM)		$3,222,427	$1,739,493	-$1,482,933	0.54
Participant Cost Test (PCT)		$1,813,338	$3,417,433	$1,604,094	1.88
Lifecycle Revenue Impacts ($/kWh)					$0.0000039690
Discounted Participant Payback (years)					6.61

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

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0979	$418,923	$330,010	-$88,913	0.79
Total Resource Cost Test (TRC) No Adder	$0.0979	$418,923	$300,009	-$118,914	0.72
Utility Cost Test (UCT)	$0.1373	$587,735	$300,009	-$287,726	0.51
Rate Impact Test (RIM)		$867,649	$300,009	-$567,640	0.35
Participant Cost Test (PCT)		$0	$479,828	$479,828	n/a
Lifecycle Revenue Impacts ($/kWh)					$0.0000018897
Discounted Participant Payback (years)					n/a

Table 10 – Wattsmart Business Electronics Cost-Effectiveness Results
(Decrement – East Plug Loads – 71%, Load Shape – Plug Load)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.1018	$147,317	$73,508	-$73,808	0.50
Total Resource Cost Test (TRC) No Adder	$0.1018	$147,317	$66,826	-$80,491	0.45
Utility Cost Test (UCT)	$0.0786	$113,746	$66,826	-$46,920	0.59
Rate Impact Test (RIM)		$208,103	$66,826	-$141,277	0.32
Participant Cost Test (PCT)		$97,100	$164,379	$67,279	1.69
Lifecycle Revenue Impacts ($/kWh)					$0.0000011224
Discounted Participant Payback (years)					2.33

Table 11 – Wattsmart Business Energy Management Cost-Effectiveness Results (Decrement – East Industrial – 40%, Load Shape – Machinery General)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0693	$2,439,022	$2,384,464	-$54,558	0.98
Total Resource Cost Test (TRC) No Adder	$0.0693	$2,439,022	$2,167,694	-$271,327	0.89
Utility Cost Test (UCT)	$0.0698	$2,455,780	$2,167,694	-$288,086	0.88
Rate Impact Test (RIM)		$5,028,294	$2,167,694	-$2,860,600	0.43
Participant Cost Test (PCT)		$508,212	$3,787,886	$3,279,675	7.45
Lifecycle Revenue Impacts ($/kWh)					$0.0000378371
Discounted Participant Payback (years)					0.12

Table 12 – Wattsmart Business Energy Manager Co-Funding Cost-Effectiveness Results (Decrement – None, Load Shape – None)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	n/a	$476,366	$0	-$476,366	n/a
Total Resource Cost Test (TRC) No Adder	n/a	$476,366	$0	-$476,366	n/a
Utility Cost Test (UCT)	n/a	$476,366	$0	-$476,366	n/a
Rate Impact Test (RIM)		$476,366	$0	-$476,366	n/a
Participant Cost Test (PCT)		$0	$476,366	$476,366	n/a
Lifecycle Revenue Impacts ($/kWh)					n/a
Discounted Participant Payback (years)					n/a

Table 13 – Wattsmart Business Farm and Dairy Cost-Effectiveness Results (Decrement – East Industrial – 40%, Load Shape – Machinery General)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0889	$38,697	$32,534	-$6,163	0.84
Total Resource Cost Test (TRC) No Adder	$0.0889	$38,697	$29,576	-$9,121	0.76
Utility Cost Test (UCT)	$0.0248	$10,781	$29,576	$18,796	2.74
Rate Impact Test (RIM)		$46,403	$29,576	-$16,826	0.64
Participant Cost Test (PCT)		$41,930	$50,821	$8,891	1.21
Lifecycle Revenue Impacts ($/kWh)					$0.0000000450
Discounted Participant Payback (years)					16.00

Table 14 – Wattsmart Business Food Service Equipment Cost-Effectiveness Results (Decrement – East Industrial – 40%, Load Shape – Machinery General)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0883	$1,517,385	$1,247,456	-$269,929	0.82
Total Resource Cost Test (TRC) No Adder	$0.0883	$1,517,385	$1,134,051	-$383,334	0.75
Utility Cost Test (UCT)	$0.0709	$1,219,159	$1,134,051	-$85,108	0.93
Rate Impact Test (RIM)		$2,341,619	$1,134,051	-$1,207,568	0.48
Participant Cost Test (PCT)		$1,195,107	$2,086,976	$891,869	1.75
Lifecycle Revenue Impacts ($/kWh)					$0.0000095935
Discounted Participant Payback (years)					2.93

Table 15 – Wattsmart Business HVAC Cost-Effectiveness Results (Decrement – East Comm. Cooling – 14%, Load Shape – HVAC)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0666	$9,273,497	$18,863,710	$9,590,213	2.03
Total Resource Cost Test (TRC) No Adder	$0.0666	$9,273,497	$17,148,827	$7,875,330	1.85
Utility Cost Test (UCT)	$0.0323	$4,489,604	$17,148,827	$12,659,223	3.82
Rate Impact Test (RIM)		$14,473,801	$17,148,827	$2,675,026	1.18
Participant Cost Test (PCT)		$9,699,989	$15,725,200	$6,025,211	1.62
Lifecycle Revenue Impacts ($/kWh)					-$0.0000076571
Discounted Participant Payback (years)					9.55

Table 16 – Wattsmart Business Irrigation Cost-Effectiveness Results (Decrement – East Comm. Cooling – 14%, Load Shape – Irrigation)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0756	$264,251	$462,849	$198,598	1.75
Total Resource Cost Test (TRC) No Adder	$0.0756	$264,251	$420,772	$156,521	1.59
Utility Cost Test (UCT)	$0.0485	$169,477	$420,772	$251,295	2.48
Rate Impact Test (RIM)		$445,675	$420,772	-$24,903	0.94
Participant Cost Test (PCT)		$245,586	$455,290	$209,704	1.85
Lifecycle Revenue Impacts ($/kWh)					$0.0000000829
Discounted Participant Payback (years)					4.76

Table 17 – Wattsmart Business Lighting Cost-Effectiveness Results
(Decrement – East Comm. Lighting – 53%, Load Shape – Lighting)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0405	$37,631,144	$71,952,238	$34,321,094	1.91
Total Resource Cost Test (TRC) No Adder	$0.0405	$37,631,144	$65,411,126	$27,779,982	1.74
Utility Cost Test (UCT)	$0.0211	$19,636,768	$65,411,126	$45,774,358	3.33
Rate Impact Test (RIM)		$84,379,290	$65,411,126	-$18,968,165	0.78
Participant Cost Test (PCT)		$46,799,732	$102,760,950	$55,961,218	2.20
Lifecycle Revenue Impacts ($/kWh)					$0.0000583719
Discounted Participant Payback (years)					4.96

Table 18 – Wattsmart Business Motors Cost-Effectiveness Results
(Decrement – East Industrial – 40%, Load Shape – Machinery General)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0369	$5,326,526	$10,695,074	$5,368,548	2.01
Total Resource Cost Test (TRC) No Adder	$0.0369	$5,326,526	$9,722,795	$4,396,269	1.83
Utility Cost Test (UCT)	$0.0285	$4,116,568	$9,722,795	$5,606,227	2.36
Rate Impact Test (RIM)		$15,893,758	$9,722,795	-$6,170,963	0.61
Participant Cost Test (PCT)		$4,593,972	$17,777,764	$13,183,791	3.87
Lifecycle Revenue Impacts ($/kWh)					$0.0000176641
Discounted Participant Payback (years)					2.25

Table 19 – Wattsmart Business Refrigeration Cost-Effectiveness Results
(Decrement – East Industrial – 40%, Load Shape – Refrigeration)

Cost-Effectiveness Test	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	$0.0523	$1,475,922	$2,160,303	$684,381	1.46
Total Resource Cost Test (TRC) No Adder	$0.0523	$1,475,922	$1,963,912	$487,990	1.33
Utility Cost Test (UCT)	$0.0322	$908,158	$1,963,912	$1,055,754	2.16
Rate Impact Test (RIM)		$3,009,876	$1,963,912	-$1,045,964	0.65
Participant Cost Test (PCT)		$1,430,104	$3,284,533	$1,854,429	2.30
Lifecycle Revenue Impacts ($/kWh)					$0.0000032188
Discounted Participant Payback (years)					5.04

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Appendix 3

Utah Measure Installation Verifications

Utah Measure Installation Verification

Low Income Weatherization

All projects

- All measures are qualified through US Department of Energy approved audit tool or priority list.
- 100 percent inspection by agency inspector of all homes treated, reconciling work completed and quality prior to invoicing Company.
- State inspectors randomly inspect 5-10 percent of completed homes.

Home Energy Savings

Site inspections are performed by Program Administrator staff for retrofit and/or new homes measures. Inspections are performed on >=5 percent of single family homes, >=5 percent of manufactured homes, and 100 percent of multifamily projects. Measures include:

- Air sealing
- Central air conditioner best practice installation & proper sizing
- Ductless heat pumps
- Duct sealing
- Duct sealing and insulation
- Electrically commutated motor (ECM) retrofit on existing gas furnace
- Gas furnace with ECM
- Heat pumps
- Heat pump water heaters
- Insulation
- Windows

Pre and post site inspections are performed on 100 percent of all whole home ducted evaporative coolers by Program Administrator staff.

Site inspections are not performed for some measures. However all post-purchase incented measures undergo a quality assurance review prior to the issuance of the customer/dealer incentive. The quality assurance includes verification of proof of purchase receipt review and eligible equipment review. Additionally, customer accounts and customer addresses are verified to ensure the Company does not double pay for the same measure or double count measure savings. The following measures do not receive a site inspection:

- Central air conditioners
- Clothes washers
- Electric water heaters

- Evaporative coolers (excluding whole home ducted)
- Freezers
- Light fixtures
- Refrigerators

Site inspections are not performed on measures that are 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. The Program Administrator verifies measures for product eligibility and correct pricing. Pricing is also verified by Program Administrator field visits to retail locations. These measures include:

- CFL bulbs
- LED bulbs
- Room air conditioners
- Advanced power strips

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

New Homes

Site inspections by Program Administrator staff for the following measures (>=5 percent):

- 15 SEER AC
- Evaporative Cooling Equipment
- Ground Source Heat Pumps
- 2x6 Walls – R20 insulation
- ENERGY STAR Lighting
- Refrigerator – CEE Tier 3
- HVAC-Quality Installation
- ECM Motor
- R-5 Windows
- IECC Energy Code Certification
- ENERGY STAR Certified Home
- High Performance ENERGY STAR Certified Home

***watt*smart Business**

For projects delivered by third part 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 is 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.

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Appendix 4

Home Energy Savings Retailers and Trade Allies

List of 2016 Participating Upstream/Midstream Lighting Retailers

Retailer	City	State	CFLs	LEDs	Fixtures*
Ace Hardware - Hurst #5738	Cedar City	UT	x	x	
Ace Hardware - Jones	Castle Dale	UT	x	x	
Ace Hardware - Olympus Hills	Salt Lake City	UT	x	x	
Ace Hardware - Rasmussen #3961	Gunnison	UT	x	x	
Ace Hardware - Salt Lake City	Salt Lake City	UT	x	x	
Ace Hardware - Smith & Edwards	Ogden	UT		x	
Ace Hardware - Tremonton #14654	Tremonton	UT	x	x	
Ace Hardware - Wyndom Square	Layton	UT	x		
Ace Hardware #14886	Highland	UT	x	x	
Ace Hardware #9314	Pleasant Grove	UT	x	x	
Ace Hardware Clearfield #15411	Clearfield	UT	x		
Ace Hardware Delta #4954	Delta	UT	x	x	
Ace Hardware of Kamas	Kamas	UT	x	x	
Barrett's Foodtown	Salina	UT	x	x	
Batteries Plus #356	Layton	UT		x	
Batteries Plus #358	Salt Lake City	UT	x	x	
Batteries Plus #754	West Jordan	UT	x	x	
Batteries Plus #802	Riverdale	UT		x	
Batteries Plus #909	West Valley City	UT		x	
Big Lots #4091	Kearns	UT	x	x	
Big Lots #4108	South Ogden	UT	x		
Big Lots #4485	West Jordan	UT	x	x	
Big Lots #4583	Salt Lake City	UT	x		
Costco #1019	South Jordan	UT		x	
Costco #113	Salt Lake City	UT		x	
Costco #487	Sandy	UT		x	
Costco #622	West Valley City	UT		x	
Costco #764	Murray	UT		x	
Costco #770	Ogden	UT		x	
Do it Best - Greer's	Tremonton	UT	x	x	
Do It Best - Jenson Lumbus	Draper	UT	x	x	
Do It Best - Marshall's Hardware	Salt Lake City	UT	x	x	
Dollar Tree #2601	Sandy	UT	x		
Dollar Tree #2605	Orem	UT	x		
Dollar Tree #2608	Salt Lake City	UT	x		
Dollar Tree #2612	Ogden	UT	x		
Dollar Tree #2630	Draper	UT	x		
Dollar Tree #2642	Magna	UT	x		
Dollar Tree #2646	Salt Lake City	UT	x		
Dollar Tree #2652	Salt Lake City	UT	x		
Dollar Tree #2659	South Jordan	UT	x		
Dollar Tree #2665	Cedar City	UT	x		
Dollar Tree #2669	Clinton	UT	x		
Dollar Tree #2670	Salt Lake City	UT	x		
Dollar Tree #2678	Tooele	UT	x		
Dollar Tree #2815	West Valley City	UT	x		
Dollar Tree #3693	Ogden	UT	x		
Dollar Tree #3779	Riverdale	UT	x		
Dollar Tree #3869	Syracuse	UT	x		

Retailer	City	State	CFLs	LEDs	Fixtures*
Dollar Tree #4979	South Jordan	UT	x		
Dollar Tree #5036	Lindon	UT	x		
Family Dollar #10148	Cedar City	UT		x	
Family Dollar #5136	Ogden	UT		x	
Family Dollar #5137	Ogden	UT		x	
Family Dollar #5143	Salt Lake City	UT		x	
Family Dollar #5170	Clearfield	UT		x	
Family Dollar #5256	Salt Lake City	UT		x	
Family Dollar #5566	Salt Lake City	UT		x	
Family Dollar #5624	Moab	UT		x	
Family Dollar #5631	West Valley City	UT		x	
Family Dollar #5704	West Valley City	UT		x	
Family Dollar #5761	Taylorsville	UT		x	
Family Dollar #5816	West Valley City	UT		x	
Family Dollar #5832	Ogden	UT		x	
Family Dollar #5853	Tremonton	UT		x	
Family Dollar #5871	West Valley City	UT		x	
Family Dollar #6141	Ogden	UT		x	
Family Dollar #6223	West Valley City	UT		x	
Family Dollar #6224	Tooele	UT		x	
Family Dollar #6282	Magna	UT		x	
Family Dollar #6287	Orem	UT		x	
Family Dollar #6292	West Jordan	UT		x	
Family Dollar #6628	Delta	UT		x	
Family Dollar #6999	Castle Dale	UT		x	
Family Dollar #7301	Grantsville	UT		x	
Family Dollar #7399	Salt Lake City	UT		x	
Family Dollar #8251	Kamas	UT		x	
Family Dollar #8729	Midvale	UT		x	
Family Dollar #9401	Salt Lake City	UT		x	
Griffith Foodtown	Coalville	UT	x		
Gunnison Market #2	Gunnison	UT	x	x	
Home Depot #4401	Riverdale	UT	x	x	
Home Depot #4402	Salt Lake City	UT	x	x	
Home Depot #4403	Salt Lake City	UT	x	x	
Home Depot #4406	West Valley City	UT	x	x	
Home Depot #4409	Sandy	UT	x	x	
Home Depot #4410	West Jordan	UT	x	x	
Home Depot #4411	Ogden	UT	x	x	
Home Depot #4413	Salt Lake City	UT	x	x	
Home Depot #4415	Park City	UT	x	x	
Home Depot #4418	Cedar City	UT	x	x	
Home Depot #4419	Tooele	UT	x	x	
Home Depot #4421	Sandy	UT	x	x	
Home Depot #8566	Riverton	UT	x	x	
Kamas Foodtown (Fresh Market)	Kamas	UT	x	x	
Lowe's #1080	Riverdale	UT	x	x	
Lowe's #1133	West Valley City	UT	x	x	
Lowe's #15	Layton	UT		x	
Lowe's #1613	West Jordan	UT	x	x	
Lowe's #2275	Salt Lake City	UT	x	x	
Lowe's #2296	Riverton	UT	x	x	
Lowe's #2606	Sandy	UT	x	x	
Lowe's #2845	Clinton	UT	x	x	

Retailer	City	State	CFLs	LEDs	Fixtures*
Lowe's #2858	Ogden	UT	x	x	
Lowe's #342	Murray	UT	x	x	
Rancho Markets #2	West Valley City	UT	x		
Rancho Markets #3	Salt Lake City	UT	x		
Rancho Markets #5	Magna	UT	x		
Rancho Markets #8	Ogden	UT	x		
Ream's Foods #10	Kearns	UT	x	x	
Ream's Foods #11	West Jordan	UT	x		
Ream's Foods #12	Salt Lake City	UT	x		
Ream's Foods #2	Salt Lake City	UT	x		
Ream's Foods #6	Salt Lake City	UT	x		
Ream's Foods #8	Magna	UT	x		
Ream's Foods #9	Sandy	UT	x		
Sam's Club #4718	South Jordan	UT		x	
Sam's Club #4730	West Jordan	UT	x	x	
Sam's Club #6682	Layton	UT	x	x	
Sam's Club #6683	Murray	UT	x	x	
Sam's Club #6684	Riverdale	UT	x	x	
Sam's Club #6686	Salt Lake City	UT	x	x	
Smith's #108	Herriman	UT	x		
Smith's #131	Ogden	UT	x		
Smith's #132	Draper	UT	x		
Smith's #137	West Valley City	UT	x		
Smith's #140	Sunset	UT	x		
Smith's #142	Syracuse	UT	x		
Smith's #144	Orem	UT	x		
Smith's #147	West Valley City	UT	x		
Smith's #158	West Jordan	UT	x		
Smith's #28	Salt Lake City	UT	x		
Smith's #30	Ogden	UT	x		
Smith's #42	Cedar City	UT	x		
Smith's #44	Salt Lake City	UT	x		
Smith's #47	Sandy	UT	x		
Smith's #65	Magna	UT	x		
Smith's #66	Salt Lake City	UT	x		
Smith's #69	Salt Lake City	UT	x		
Smith's #72	Park City	UT	x		
Smith's #73	Pleasant Grove	UT	x		
Smith's #77	Salt Lake City	UT	x		
Smith's #80	Salt Lake City	UT	x		
Smith's #81	Salt Lake City	UT	x		
Smith's Marketplace #274	West Jordan	UT		x	
Smith's Marketplace #279	North Ogden	UT	x	x	
Smith's Marketplace #475	Salt Lake City	UT	x	x	
Smith's Marketplace #495	West Jordan	UT	x	x	
Smith's Marketplace #94	Salt Lake City	UT	x	x	
Sutherland Lumber	Salt Lake City	UT	x	x	
Target #0768	West Jordan	UT	x	x	
Target #1751	Salt Lake City	UT		x	
Target #1752	Sandy	UT	x	x	
Target #1753	Riverdale	UT	x	x	
Target #1754	Orem	UT	x	x	
Target #1755	Layton	UT	x	x	
Target #2123	South Jordan	UT	x	x	

Retailer	City	State	CFLs	LEDs	Fixtures*
Target #2150	West Jordan	UT	x	x	
Target #2609	West Valley City	UT	x	x	
Target #2641	Salt Lake City	UT	x	x	
The Market at Park City	Park City	UT	x	x	
True Value Family Stores	Salt Lake City	UT	x	x	
True Value Hardware - Losee Lumber	Delta	UT	x	x	
True Value Hardware - Valley Builder	Gunnison	UT	x		
Walgreens #01776	Pleasant Grove	UT	x		
Walgreens #02527	South Ogden	UT	x		
Walgreens #06669	South Jordan	UT	x		
Walgreens #07007	Riverton	UT	x		
Walgreens #10415	Tooele	UT	x		
Walgreens #11337	Cedar City	UT	x		
Walgreens #12294	Draper	UT	x		
Walgreens #15013	South Ogden	UT	x		
Walgreens #2519	Clinton	UT	x		
Walgreens #2529	Syracuse	UT	x		
Walgreens #6282	Taylorsville	UT	x		
Walgreens #6988	West Jordan	UT	x		
Walgreens #7495	Roy	UT	x		
Walgreens #9237	Sandy	UT	x		
Walgreens #9464	Sandy	UT	x		
Wal-Mart - Supercenter #1699	Layton	UT	x	x	
Wal-Mart - Supercenter #2921	Harrisville	UT	x	x	
Wal-Mart - Supercenter #3589	Salt Lake City	UT	x	x	
Wal-Mart - Supercenter #3620	Riverton	UT	x	x	
Walmart #1438	Cedar City	UT	x	x	
Walmart #1440	Tooele	UT	x	x	
Walmart #1686	Taylorsville	UT	x	x	
Walmart #1708	Riverdale	UT	x	x	
Wal-Mart #1827	Park City	UT	x	x	
Walmart #2207	Midvale	UT		x	
Walmart #2307	South Jordan	UT	x	x	
Walmart #3232	West Jordan	UT	x	x	
Walmart #3568	West Valley City	UT	x	x	
Walmart #3789	Ogden	UT	x	x	
Walmart #3848	Syracuse	UT	x	x	
Walmart #4208	Salt Lake City	UT		x	
Walmart #4689	Cedar Hills	UT	x	x	
Walmart #5109	West Valley City	UT		x	
Walmart #5110	Draper	UT		x	
Walmart #5120	South Jordan	UT		x	
Walmart #5205	Layton	UT		x	
Walmart #5206	South Ogden	UT		x	
Walmart #5233	West Valley City	UT	x	x	
Walmart #5234	Clinton	UT	x	x	
Wal-Mart #5350	Salt Lake City	UT	x	x	
Walmart #5763	South Jordan	UT	x	x	
Wal-Mart #7168	Herriman	UT		x	
Wal-Mart of Lindon #5270	Lindon	UT	x	x	
Walmart of Sandy #5235	Sandy	UT	x	x	
Wal-Mart of Syracuse #3848	Syracuse	UT	x	x	

Retailer	City	State	CFLs	LEDs	Fixtures*
Winegar's Supermarkets Inc Roy	Roy	UT	x		

*No dowstream fixtures were offered in 2016.

List of 2016 Participating Upstream/Midstream Appliance Retailers

Retailer	City	State	Room Air Conditioners	Advanced Power Strips
There were no participating retailers for room air conditioners or advanced power strips.				

List of 2016 Participating Downstream Retailers

Includes a summary of product types that were redeemed in 2016 at each location

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Ace Hardware - Riverton	Riverton	UT										x								
Boyle Appliance Center	Ogden	UT	x	x			x													
Costco #1019	South Jordan	UT		x							x									
Costco #113	Salt Lake City	UT		x								x								
Costco #484	Orem	UT									x									
Costco #487	Sandy	UT		x							x									
Costco #622	West Valley City	UT		x							x									
Costco #733	Lehi	UT		x																
Costco #764	Murray	UT		x																
Costco #770	Ogden	UT		x																
Home Depot #1802*	Idaho Falls	ID						x												
Home Depot #4401	Riverdale	UT	x	x				x	x	x	x	x				x			x	
Home Depot #4402	Salt Lake City	UT	x	x				x	x		x	x				x			x	
Home Depot #4403	Salt Lake City	UT	x	x			x	x	x	x	x	x				x	x		x	x
Home Depot #4406	West Valley City	UT	x	x			x	x	x		x	x				x				
Home Depot #4407	Lindon	UT	x	x			x	x		x	x	x				x				
Home Depot #4408	Centerville	UT	x	x			x	x	x		x	x				x			x	
Home Depot #4409	Sandy	UT	x	x			x	x	x		x	x				x			x	x
Home Depot #4410	West Jordan	UT	x	x				x	x	x	x	x				x			x	
Home Depot #4411	Ogden	UT	x	x				x	x		x	x				x			x	x
Home Depot #4412	Washington	UT	x								x									
Home Depot #4413	Salt Lake City	UT	x	x			x	x	x	x	x	x				x			x	x
Home Depot #4414	Logan	UT	x	x			x	x	x		x	x								
Home Depot #4415	Park City	UT	x	x							x									
Home Depot #4416	Provo	UT	x	x				x	x		x	x				x	x			
Home Depot #4417	American Fork	UT	x	x			x	x			x	x				x			x	
Home Depot #4418	Cedar City	UT	x	x				x	x		x	x				x			x	
Home Depot #4419	Tooele	UT	x	x				x	x		x	x				x			x	
Home Depot #4420	St. George	UT	x								x									
Home Depot #4421	Sandy	UT	x				x		x		x	x								x

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Home Depot #4422	Richfield	UT	x	x				x	x		x	x				x				
Home Depot #8566	Riverton	UT	x	x			x	x	x		x	x				x			x	
Home Depot #8583	Layton	UT	x	x			x	x	x	x	x	x				x			x	
Larsen's Ace Hardware #1044	Richfield	UT						x	x		x	x			x					
Lowe's #1080	Riverdale	UT	x	x				x			x	x							x	
Lowe's #1118	St. George	UT	x	x							x	x								
Lowe's #1133	West Valley City	UT	x	x				x			x	x				x				
Lowe's #15	Layton	UT	x	x					x		x	x				x				
Lowe's #1501	Logan	UT	x	x					x		x			x		x				
Lowe's #1613	West Jordan	UT	x	x						x	x	x							x	x
Lowe's #178	Orem	UT	x	x				x			x	x								
Lowe's #2275	Salt Lake City	UT	x	x				x			x	x		x		x			x	
Lowe's #2293	Lehi	UT	x	x			x				x									
Lowe's #2296	Riverton	UT	x	x							x	x				x				
Lowe's #2606	Sandy	UT	x	x				x			x	x				x				x
Lowe's #2662	West Bountiful	UT	x	x							x	x								
Lowe's #2834	Vernal	UT	x	x							x									
Lowe's #2845	Clinton	UT	x	x							x	x				x			x	x
Lowe's #2858	Ogden	UT	x	x				x	x		x	x								
Lowe's #342	Murray	UT	x	x				x			x	x								
RC Willey - Murray	Murray	UT	x	x																
RC Willey - Orem	Orem	UT	x																	
RC Willey - Riverdale	Riverdale	UT	x	x			x													
RC Willey - Syracuse	Syracuse	UT	x	x																
RC Willey- Draper	Draper	UT	x	x																
RC Willey Home Furnishings	Salt Lake City	UT	x	x																
Sutherlands #2219	Casper	UT										x								
Ace Hardware - Hurst #5738	Cedar City	UT						x			x									
Ace Hardware - Rasmussen #3961	Gunnison	UT										x								
Best Buy #1146	West Jordan	UT	x	x																
Best Buy #1402	American Fork	UT	x	x																
Best Buy #1761	Park City	UT	x																	
Best Buy #496	Riverdale	UT	x	x																
Best Buy #497	Sandy	UT	x																	
Best Buy #521	Murray	UT	x	x																

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Best Buy #527	Salt Lake City	UT	x																	
Best Buy #773	Orem	UT	x																	
Bill's Home Furnishings Inc	Price	UT						x												
Boulevard Home Furnishings	St. George	UT	x																	
Charlie Fuller's Appliance	Woods Cross	UT	x																	
Darrell's Appliance Service & Sales	Benson	UT	x	x																
Duerden's Appliance	Bountiful	UT	x	x																
Heber Appliance	Heber City	UT	x																	
Home Selections by Fergusons	Salt Lake City	UT		x								x								
Hooker Appliance Inc	Logan	UT	x																	
Hutch's Home Furnishings	Lehi	UT	x																	
Liddiard Home Furnishings	Tooele	UT	x																	
Mountain Land Design - SLC	Salt Lake City	UT	x	x																
Murphy's Appliance	Brigham City	UT	x																	
Ogden's Superstore	Richfield	UT	x	x																
Sears	Layton	UT	x	x																
Sears #1118	Salt Lake City	UT	x	x																
Sears #1301	Provo	UT	x	x																
Sears #1718	Ogden	UT	x	x																
Sears #1888	West Jordan	UT	x	x																
Sears #2220	St. George	UT	x																	
Sears #2559	Sandy	UT	x	x																
Sears #3058	Price	UT	x	x																
Sears #3529	Cedar City	UT	x	x																
Sears #7408	Tooele	UT	x																	
Southwest Appliance Wholesale	Cedar City	UT	x	x																
Sparrow's Home Furnishings	Roy	UT	x	x																
Sutherlands - SLC	Salt Lake City	UT						x			x	x								

*Retailer is located in Idaho but participates in the wattsmart Homes Program.

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Redemptions from Non-Participating Retailer's (Retailer may not be located in the service territory)	**City***	**State**	**Clothes Washer**	**Freezer**	**Clothes Dryer**	**Smart Thermostat**	**Refrigerator**	**Evaporative Cooler - Permanently Installed,Self-Installed**	**Evaporative Cooler - Portable**	**Evaporative Cooler - Premium Ducted,Self-Installed**	**Evaporative Cooler - Premium,Self-Installed**	**Evaporative Cooler - Replacement,Self-Installed**	**Evaporative Cooler - Tier 2**	**Heat Pump Water Heater, Self-installed**	**Insulation-Attic**	**Insulation-Attic,Self-Installed**	**Insulation-Floor,Self-Installed**	**Insulation-Wall**	**Insulation-Wall,Self-Installed**	**Windows**
Ace Hardware Delta #4954	Delta	CO						x				x								
Anasazi Heating & Air Conditioning	Hurricane	UT									x									
Forsyth Heating & Air Conditioning	Cedar City	UT										x								
Home Depot #4013	Portland	OR	x																	
AJ MADISON INC	Online	N/A	x	x																
AllergyandAir.com	Online	N/A									x									
Alside Supply	Ogden	UT																		x
Alside Supply Center	Salt Lake City	UT																		x
Alumaline Corporation	Salt Lake City	UT																		x
Alvey Lumber Company	Sigurd	UT																	x	
Amazon.com	Online	N/A	x	x								x								
American Appliance	Riverton	UT						x												
Appliancesconnection.com	Online	N/A												x						
Aspire Design	Sandy	UT	x																	
Attic Pro Insulation	American Fork	UT														x				
Beckler HVAC	West Valley	UT										x								
Ben Lomond Heating & Air Conditioning Inc.	Harrisville	UT										x								
Best Buy #318	Vernon Hills	IL		x																
BestBuy.com	Online	N/A	x	x																
Blue Seal Energy	Adrian	OR																	x	
Bountiful Window and Door	Bountiful	UT																		x
Brent Alvey Plumbing	Ogden	UT	x	x																
Brody's Glass House	Ogden	UT																		x
Build.com, Inc.	Online	N/A												x						
Burton Lumber	Lindon	UT																		x
Carlos Appliances	Sandy	UT	x																	
Case Construction & Roofing	Salt Lake City	UT									x									
CJS Do It Center	Price	UT						x				x								
Clear Choice Windows	West Jordan	UT																		x
Comfortable Air	Salt Lake City	UT									x									

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
ComfortGurus.com	Online	N/A									x									
Contractors Window Supply	Salt Lake City	UT																		x
Cooler Runnings	Sandy	UT										x								
Cooling Heating Supply	Cedar City	UT									x									
Costco	Billings	UT	x																	
Costco #735	West Bountiful	UT		x					x											
Costco.com	Online	N/A	x																	
Department of Veterans Affairs	Salem	OR	x																	
Eagle Rock Supply	Salt Lake City	UT														x			x	
EJ Martin Roofing	Kearns	UT										x								
Energy One	Sandy	UT																		x
Essential + Heating & Air Conditioning LLC	West Valley City	UT										x								
EZ Rent to Own	Ogden	UT	x																	
Fairway Glass LLC	Morgan	UT																		x
Ferguson Enterprises	Los Angeles	CA	x	x																
Ferguson Enterprises - Orem	Orem	UT										x								
Ferguson Enterprises, Inc #3032	Salt Lake City	UT										x								
GE Appliance Store--online	Online	N/A	x																	
Glen Paulsen Co.	South Jordan	UT																		x
Goedecker's	Online	N/A	x																	
Guardian Energy Tech	Reno	NV															x			
Guy Webb & Company LLC	Riverton	UT						x												
Guy's Glass Inc.	Clearfield	UT																		x
Handyman Services & Swamp Cooler Maintenance	Salt Lake City	UT										x								
Hercules Industries - SLC	Salt Lake City	UT									x									
Hill Main Exchange Store	Hill AFB	UT		x																
Hilton Homeworks, Inc.	Riverton	UT																		x
Home Depot	Baton Rouge	UT										x								
Home Depot #1513	Grand Junction	UT							x			x								
Home Depot #3855	Fairborn	OH										x								
Home Depot #8119	Atlanta	GA									x									
Home Depot 0402	Yuma	AZ	x								x									
Home Depot At Home Services	Online	N/A																		x
HomeDepot.com	Online	N/A	x	x			x	x			x	x								
HomeShopBuy.com	Online	N/A	x																	
Insulation Solutions	Alpine	UT														x				
Intermountain Heating & Air Conditioning, Inc	Twin Falls	ID									x									

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
JCPenny.com	Online	N/A	x	x																
Johnson Electric Motor, Inc.	Ogden	UT									x									
K&C Windows	Gilbert	AZ																		x
Karl's Sales and Service	Fairfield	NJ	x																	
KJS Heating and Air Conditioning LLC	Draper	UT									x									
Knowles Home Furnishings	Moab	UT	x																	
Lansing Building Products	Logan	UT																		x
Lonnie's DO-IT-All Handyman Service	Ferron	UT						x												
Lowe's of Grand Junction	Grand Junction	CO	x																	
Lowe's of Hurst	Hurst	TX		x																
Lowe's of Las Vegas	Las Vegas	NV										x								
Lowe's of Orem - Duplicate	Orem	UT												x						
Lowe's of Wilkesboro	Wilkesboro	NC	x																	
Lowes.com	Online	N/A	x	x				x			x	x		x						
Mitton Services	Taylorsville	UT										x								
Peak Home Improvement	Ogden	UT									x	x								
Peterson Plumbing & Heating	Richfield	UT										x								
Peterson Plumbing Supply	Richfield	UT										x								
Powell's Pro	Sandy	UT																		x
RC Willey - Summerlin	Las Vegas	NV	x																	
RC WIlley Appliances Online Order	Online	N/A	x	x			x													
R-Factor LLC	Salt Lake City	UT														x				
Richard Maughan Carpentry	Sandy	UT																		x
Riverside Plumbing & Heating	Moab	UT							x											
Roper Lumber Company	Fillmore	UT									x	x								
Salt City Heating and Air Conditioning	Salt Lake City	UT						x												
Sears	Ann Arbor	UT	x																	
Sears # 5578	Logan	UT	x	x																
Sears #03298	Helena	MT	x																	
Sears #1229	Boise	ID	x																	
Sears #1558	Murray	UT	x																	
Sears #1808	Houston	TX	x																	
Sears #2049	Everett	WA	x																	
Sears #2361	Grand Jct	CO	x																	
Sears #4654	Murray	UT	x																	
Sears #5202	Heber City	UT		x																
Sears Home Improvement Products	Longwood	UT												x						x
Sears of Logan	Logan	UT	x																	
Sears.com	Online	N/A	x	x			x													
Sierra West & Associates, LLC.	Midvale	UT																		x

Participating Retailer (Retailers who are actively enrolled in the program)	City*	State	Clothes Washer	Freezer	Clothes Dryer	Smart Thermostat	Refrigerator	Evaporative Cooler - Permanently Installed,Self-Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump Water Heater, Self-installed	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
STANDARD PLUMBING SUPPLY CO	Sandy	UT										x								
Stott Plumbing & Heating	South Salt Lake	UT										x								
Sutherland Bldg Material Shopping Centers, Inc.	Price	UT						x			x	x								
Sutherlands - Price	Price	UT						x	x			x								
Tapp Glass and Windows LLC	Sandy	UT																		x
Temperature Difference LLC	Sandy	UT										x								
The Home Depot, Inc.	Atlanta	GA										x								
The NPS Store Industrial	Salt Lake City	UT						x												
Tri-Tech Glass	Farr West	UT																		x
United Subcontractors, Inc.	Salt Lake City	UT													x			x		x
UNI-WEST INC.	Riverton	UT										x								
Utah Discount Windows	Midvale	UT																		x
Valley Glass Inc (Layton)	Layton	UT																		x
Walmart of Laurel	Laurel	MT	x																	
wal-mart.com	Online	N/A		x			x	x				x								
Wheelwright Lumber	Ogden	UT																	x	
Whirlpool Everyhome Partners.com	Online	N/A	x																	
Whirlpool.com	Online	N/A	x																	
Window Depot of Utah	North Salt Lake	UT																		x
Window Monsters	Provo	UT																		x
Woody's Best Value	St George	UT							x											
Zoro	Buffalo Grove	UT									x									

List of 2016 Participating HVAC Trade Allies

Includes a summary of measures that were redeemed in 2016 from each trade ally

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Best Practice Installation & Sizing	Central Air Conditioner Equipment	Central Air Conditioner Equipment - Tier 1	Central Air Conditioner Equipment - Tier 2	Central Air Conditioner Equipment - Tier 3	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 1	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade - Tier 1	Heat Pump to Heat Pump Upgrade - Tier 2	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless
A Better Service Co	Murray	UT											x											
AAA Comfort Specialists	Eagle Mountain	UT																x						
AAA Comfort Specialists Heating & Cooling	Eagle Mountain	UT														x								
ABC Swamp Cooler	Layton	UT											x			x	x							
Absolute Air Heating and Air Conditioning	Mapleton	UT	x		x	x	x		x															
ABT Mechanical	Orem	UT	x			x																		
Ace Air Conditioning & Heating LLC	Bluffdale	UT											x	x			x							
Action Plumbing, Heating, and AC	West Jordan	UT			x	x	x	x	x									x						
Acx Service	Ogden	UT															x							
Advanced Heating & Air Conditioning, Inc.	Logan	UT			x				x															x
Advantage Heating and Air	West Jordan	UT		x					x															
Affordable Heating and Cooling Inc	Salt Lake City	UT			x	x			x															
After Hours Heating & Cooling	Holladay	UT			x																			
Air Conditioning & Heating Service	North Ogden	UT			x				x															
Air Design Heating and Cooling LLC	Murray	UT	x		x	x		x	x								x							
Air Force Heating & AC Inc	Springville	UT			x				x															
Air Now Heating & Air Conditioning	Ogden	UT			x	x			x															
Air Source Heating & Cooling, Inc.	Lehi	UT				x			x															
Aire Expresso Heating & Cooling	Tooele	UT			x				x															
Aire Serv of Salt Lake/Tooele	Salt Lake City	UT	x		x	x			x				x											
Aire Serv of Utah Valley (Comfort Tech)	Orem	UT	x			x			x															
Aire-Flo Heating and Air Conditioning, Inc.	Murray	UT							x								x							
Airtime Heating and Cooling	Bluffdale	UT			x																			
All-Pro HVAC	Ogden	UT	x		x	x			x															
Allred's Inc.	Midvale	UT													x	x								
Any Climate Mechanical	Sandy	UT			x																			
Any Hour, Inc.	Orem	UT							x															
Arrant Heating	Clearfield	UT	x		x	x			x								x							
Atherton Park Apartments	Taylorsville	UT															x							
Atkinson Electronics, Inc.	Murray	UT						x																
Authority Heating & Cooling	Orem	UT			x	x			x															
Automated Heating & Air Conditioning Inc.	Ogden	UT			x				x															
Barwick Heating & Cooling	Springville	UT				x																		
Bergmann Heating and Air Conditioning	Orem	UT	x		x	x		x	x															x
Berry Plumbing and Heating	Spanish Fork	UT				x					x													
Bills Comfort Systems	Layton	UT	x		x	x			x			x						x			x	x		
Bill's Comfort Systems Murray	Murray	UT	x		x	x		x	x															
Boulard Heating & Air Conditioning	West Jordan	UT			x												x							
Boyd I Hoskins Jr & Son Inc	Ogden	UT																x						
Brian's Canvas Products	Clearfield	UT														x		x						
Bryan Pons Enterprises	Taylorsville	UT											x											
Budget Plumbing & Rooter LLC	American Fork	UT												x										
Call Climate Services	Centerville	UT	x		x	x	x		x															
Canyon Heating and Air Conditioning	Salt Lake City	UT			x																			
Carpenter Furnace Co Inc	Ogden	UT	x		x				x															x
Cedar Valley Heating & Air Conditioning	Cedar City	UT			x				x				x	x			x							
Climate Doctor LLC	Payson	UT	x						x															
Comfort Champions	Draper	UT	x		x	x		x	x															
Comfort Solutions	Ogden	UT	x		x	x	x		x															x
Comfort Systems USA	Salt Lake City	UT	x		x	x			x															x

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Best Practice Installation & Sizing	Central Air Conditioner Equipment	Central Air Conditioner Equipment - Tier 1	Central Air Conditioner Equipment - Tier 2	Central Air Conditioner Equipment - Tier 3	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 1	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade - Tier 1	Heat Pump to Heat Pump Upgrade - Tier 2	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless
Comfort Zone/ PC Industries	Salt Lake City	UT			x	x			x															
Complete Comfort Heating & Air Conditioning	Springville	UT	x		x				x															
Connect Building Services, Inc	Sandy	UT			x				x															
CTR Heating and Air	West Jordan	UT			x				x															
Custom Air, Inc.	Murray	UT			x																			
Custom Comfort	Centerville	UT															x							
Customer Comfort LLC	Centerville	UT				x			x															
CW Heating and Air	Riverton	UT			x																			
Davis Heating & A/C Service, Inc.	Cedar City	UT																x						
Denny's Service Co	South Ogden	UT	x		x				x								x							
Design Comfort	Salt Lake City	UT			x	x							x				x							
Dick Kearsley Service Center	Clearfield	UT	x		x				x			x	x	x			x	x						
Eagar Heating & Cooling	Pleasant Grove	UT				x																		
EcoServices Intermountain	Ogden	UT			x	x			x															x
Elite Heating & Air Conditioning, LLC.	West Jordan	UT																				x		
Energy Rewards Heating and Air Conditioning LLC	West Haven	UT			x				x															
Energy Savers Insulation	Layton	UT															x							
Environmental Refrigeration Services Inc Heating and Cooling (ERS Inc)	Plain City	UT							x								x							
ESCO Services	Salt Lake City	UT			x	x			x															x
Extraordin-Aire	Plain City	UT						x	x				x			x	x							
Fahrenheit Heating & Air Conditioning	Mapleton	UT							x															
Fisher HVAC	Salt Lake City	UT			x				x															x
Genuine Comfort HVAC	Centerville	UT					x																	
Gillette Heating and Air Conditioning	Salem	UT	x		x	x			x															x
Gray Wolf Mechanical	Provo	UT			x			x	x															
Gunther's Comfort Air	American Fork	UT	x		x	x	x		x															x
H & M Heating	Kaysville	UT			x				x															
Hansen HVAC & Plumbing Services	West Jordan	UT	x		x	x			x															x
Harris-Dudley Plumbing Co.	Salt Lake City	UT							x															
Hartman Plumbing, Heating, and Air	Sandy	UT							x															
Healthy Home	Salt Lake City	UT											x				x							
Heber Park City Appliance Sales and Service	Heber City	UT									x												x	
High Country HVAC, Inc.	Centerville	UT	x		x	x	x	x	x															
Holbrook Service, LLC	Salt Lake City	UT				x			x				x											
Holmes & Holmes Industrial	Magna	UT	x		x	x		x	x															
Home Energy Solutions	Centerville	UT														x								
Huish Heating and A/C Inc.	Taylorsville	UT							x															
Humphrey Heating and Air	Bountiful	UT			x				x															x
Hustad Mechanical Inc	Nibley	UT							x															
HVAC Construction Inc	North Salt Lake	UT			x	x			x													x		
HVAC Plus, Inc.	Salt Lake City	UT			x				x															
HVAC Utah	Layton	UT	x		x	x	x		x															
Hyland Heating	West Jordan	UT			x				x															
Ideal Heating & Cooling, Inc.	Park City	UT			x				x															
Intermountain Swamp Cooler Service Inc	Murray	UT														x								
J & M Plumbing, Heating & Air Inc.	West Jordan	UT											x				x							
Jones Heating & Air Conditioning	West Valley City	UT			x	x							x				x							
Just Right Heating & Cooling, LLC.	Salt Lake City	UT	x		x	x			x															
K Lund Mechanical	West Jordan	UT											x											
K.O. Installers, Inc.	Plain City	UT										x	x			x	x	x						
Kelly's Heating and Cooling	South Salt Lake City	UT	x		x				x															
Larkin HVAC on Utah, Inc.	Sandy	UT				x																		

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Best Practice Installation & Sizing	Central Air Conditioner Equipment	Central Air Conditioner Equipment - Tier 1	Central Air Conditioner Equipment - Tier 2	Central Air Conditioner Equipment - Tier 3	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 1	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade - Tier 1	Heat Pump to Heat Pump Upgrade - Tier 2	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless
Larsen Heating & Air Conditioning	Saratoga Springs	UT			x	x			x															
Lee's Heating and Air	Salt Lake City	UT			x	x	x		x															x
Long's Air Service Inc	American Fork	UT					x		x															
Lyman Dutson	Riverton	UT			x				x															
Main Street Heating & Cooling	Sandy	UT			x	x		x	x															x
Manwill Plumbing and Heating	Salt Lake City	UT			x	x	x	x	x				x				x	x						x
Max Comfort Air Systems	West Valley	UT											x											
McLaughlin Air Conditioning and Heating Inc	Hurricane	UT																				x	x	x
Method Air HVAC	Sandy	UT			x	x			x															
Mike Hansen's HVAC Solutions	Syracuse	UT			x																			
Millcreek Plumbing Inc.	Salt Lake City	UT											x											
Moab Heat & Cool, LLC.	Moab	UT							x				x				x							
Modern Mechanical	Ogden	UT															x							
Mountain Air Conditioning and Heating	Ogden	UT			x	x	x	x	x		x													x
Mountainwest Service Experts	North Salt Lake	UT	x		x				x															
My Buddy the Plumber Heating & Air	Salt Lake City	UT	x		x	x			x															
Nebo Comfort Systems	Payson	UT	x			x			x															
Neerings Plumbing & Heating	Salt Lake City	UT			x	x	x		x															
Nelson's Heating & Refrigeration	Moab	UT													x									
Nichols HVAC, LLC.	Murray	UT			x				x															
North Star Heating & Air Conditioning	West Jordan	UT			x																			
Outfitters HVAC, Inc	Centerville	UT											x											
Parley's PPM LLC	Orem	UT	x		x	x			x				x											x
PerfecTemp Heating and Air	Ogden	UT				x			x								x							
Performance HVAC LLC	Sandy	UT	x						x								x							
Pleasant Air	Pleasant Grove	UT	x			x			x															
Pond's Plumbing Heating AC	North Salt Lake	UT			x	x			x				x											
Precise Plumbing Heating & AC	Midvale	UT																x						
Precision Air Management	Lehi	UT							x															x
Precision Comfort Systems	Murray	UT			x				x															
Preferred Service Heating, Cooling and Air Purity Inc	South Jordan	UT			x		x		x															
Professional Heating and Air Conditioning	Pleasant Grove	UT			x				x								x							
Rentmeister Total Home Services	Syracuse	UT			x	x			x				x				x							
Riverside Plumbing and Heating Inc.	Moab	UT											x				x							
Rocky Mountain Air Systems	Midvale	UT											x											
Salmon HVAC	Centerville	UT	x		x	x	x	x	x															
Same Day Heating and Air	Salt Lake City	UT	x		x	x	x		x															
Sammy's Heating and Air, LLC	Bountiful	UT											x				x							
Scott Hale Plumbing, Heating & Air	Salt Lake City	UT			x																			
Scott Heating & Air Inc	Ogden	UT			x	x		x	x				x											
Select Comfort Systems	West Valley City	UT			x			x	x															
Service Experts Heating & Air Conditioning	Ogden	UT	x		x	x	x		x								x							
Service Experts of Salt Lake City	Midvale	UT	x		x	x	x	x	x															
Service Experts of Utah - Provo	Midvale	UT			x	x	x	x	x															
Sloan Construction Corp.	Salt Lake City	UT											x	x										
Smedley & Associates Plumbing and Heating	Layton	UT	x		x	x	x		x															
Snow Canyon Heating & Cooling Inc	St George	UT			x						x													
Southwest Air Conditioning Heating and Energy LLC	St George	UT																				x		
Superior Water and Air, Inc.	West Valley City	UT	x		x	x	x		x	x							x					x		x
The Furnace Man Heating-Cooling LLC	Salt Lake City	UT															x							
Thompson's Comfort Connection	Midvale	UT			x	x			x															x

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Central Air Conditioner Best Practice Installation & Sizing	Central Air Conditioner Equipment	Central Air Conditioner Equipment - Tier 1	Central Air Conditioner Equipment - Tier 2	Central Air Conditioner Equipment - Tier 3	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 1	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Premium Ducted,Self-Installed	Evaporative Cooler - Premium,Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement,Self-Installed	Evaporative Cooler - Tier 2	Heat Pump to Heat Pump Upgrade - Tier 1	Heat Pump to Heat Pump Upgrade - Tier 2	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless
Titan Heating & Air Conditioning	West Jordan	UT			x				x					x										
Triple T Inc	Spanish Fork	UT	x		x	x			x															x
Warner Heating	Riverton	UT			x																			
Welch Heating and Air Conditioning	Salt Lake City	UT			x																			
Western Heating & Air Conditioning	Orem	UT	x		x	x	x		x															
Western Mechanical Inc.	Logan	UT			x		x		x								x							
Whipple Service Champions	Salt Lake City	UT	x		x	x			x															

List of 2016 Participating Manufactured Homes Trade Allies
Includes a summary of measures that were redeemed in 2016 from each trade ally

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Manufactured Homes Duct Sealing	Duct Sealing w/Crossover - Manufactured Homes
Home Energy Experts	Clearfield	UT	x	x

List of 2016 Participating Plumbing Trade Allies
Includes a summary of measures that were redeemed in 2016 fro

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Heat Pump Water Heaters
JM Mechanical	Hyde Park	UT	x
Straightline Plumbing LLC	St George	UT	x

List of 2016 Participating Weatherization Trade Allies
Includes a summary of measures that were redeemed in 2016 from each trade ally

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Air Sealing	Duct Sealing & Insulation	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
5 Star Building Products, LLC	Orem	UT			x					
5 Star Building Products, LLC.	Orem	UT			x					
A1 Utah Insulation	South Jordan	UT			x					
ABCO Glass Products	Lindon	UT								x
Absolute Air Heating and Air Conditioning	Mapleton	UT			x					
Advanced Insulation	Morgan	UT			x					
Advanced Window Products, Inc.	Salt Lake City	UT								x
Advantage Window & Door LLC	Taylorsville	UT								x
Air Tight Energy Inc. (Omnia Services Group)	Orem	UT	x	x						
Aire-Flo Heating and Air Conditioning, Inc.	Murray	UT								
All Purpose Windows & Doors-Salt Lake City 84114	Salt Lake City	UT								x
All-Purpose Windows & Doors-Salt Lake City 84119	Salt Lake City	UT								x
Alpine Exteriors, LLC.	South Jordan	UT								x
American Exteriors LLC	West Valley City	UT								x
American Home Services, Inc.	Orem	UT								x
Andersen Construction	West Jordan	UT								x
Apex Energy Solutions LLC	Salt Lake City	UT								x
Applied Energy Solutions	Woods Cross	UT			x			x		
Barton Insulation	Vernal	UT			x					
BDI Insulation of Salt Lake City	Salt Lake City	UT			x			x		
Bennett's Glass of Logan	Logan	UT								x
Best Property Improvements Inc.	Holladay	UT			x			x		
Best Property Improvements Inc.	Holladay	UT		x						
Bonded Insulation	Salt Lake City	UT			x			x		
Bruce Allsop Insulation	Hyrum	UT			x					
Building Services Group	Salt Lake City	UT			x			x		
Burton Lumber Insulation	Salt Lake City	UT								x
Caco Construction Corp.	Lehi	UT								x
Champion Windows	Salt Lake City	UT								x
Chris W. Thurgood Construction Inc.	Bothwell	UT								x
CJ's Home Improvement	West Valley City	UT								x
Clean Cut Glass	West Valley City	UT								x
Clear View Installs, LLC.	Sandy	UT								x
Colonial Building Supply	Centerville	UT								x
Cornerstone Worx Inc	Riverdale	UT			x			x		
Double T, Inc.	Salt Lake City	UT								x
Eco Insulation	St George	UT	x		x	x		x		
Eco Insulation	St George	UT			x					
Element Construction, Inc.	Harrisville	UT								x
Elite Energy Solutions	Lindon	UT		x	x			x		
Energy Pro	Syracuse	UT			x	x		x		
Energy Savers Insulation	Layton	UT		x	x	x	x	x	x	
Energy Wise Insulation	Salt Lake City	UT		x	x					
ESCO Services	Salt Lake City	UT			x					
Greenhome Specialties	Layton	UT			x			x		x
Greenify Energy Savers	Sandy	UT			x					x
Hansen All Seasons	Lindon	UT			x			x		
Home Energy Experts	Clearfield	UT		x						

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Air Sealing	Duct Sealing & Insulation	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Home Energy Solutions	Centerville	UT		x	x					
Homestar Windows and Doors	Sandy	UT								x
Hone Insulation	Levan	UT			x			x		
Housing Authority of Utah County	Provo	UT			x					
Insulation From Hale LLC	North Salt Lake	UT			x			x		
Insulation From Hale, LLC	Salt Lake City	UT			x					
International Installations LLC	Lehi	UT								x
J & K Insulation LLC	PLEASANT VIEW	UT			x	x		x		
J.R. Remodeling Specialist	Draper	UT			x					
Jake Steenbergen Construction, Inc.	Murray	UT								x
Jarrett Construction Inc	Orem	UT								x
Jones Paint & Glass	American Fork	UT								x
Jones Paint & Glass- Provo	Provo	UT								x
Jones Paint & Glass- St George	St George	UT								x
K-Designers	West Valley City	UT								x
Kendall Insulation	Ogden	UT			x			x		
Mountain States Windows & Siding	Lehi	UT								x
Mountainland Exteriors	Riverton	UT								x
Moyes Glass and Supply	Ogden	UT								x
Mr. Window	Salt Lake City	UT								x
Nelson Insulation	Roy	UT			x			x		
New Look Siding, LLC	Midvale	UT								x
New Vision Construction Inc.	West Haven	UT								x
Peach Building Products	Midvale	UT								x
Pella Windows & Doors	Draper	UT								x
Penguin Insulation, LLC	Layton	UT			x					
Performance Glass	Stansbury Park	UT								x
Precision Building, LLC	West Valley	UT			x			x		
Premier Building Supply	American Fork	UT			x					
Property Medics	Bluffdale	UT			x					
Renewal by Andersen of Salt Lake	Salt Lake City	UT								x
RLA & Sons, LLC.	Draper	UT			x					
Roberts Bros Inc	West Valley City	UT								x
Rocky Mountain Windows and Doors Inc.	Orem	UT								x
SB Window Sales LC	Salt Lake City	UT								x
Service Experts Heating & Air Conditioning	Ogden	UT			x					
Service Experts of Salt Lake City	Midvale	UT			x					
Slade N Company	Salt Lake City	UT								x
Sunroc Building Materials	Lindon	UT			x			x	x	
Superior Home Improvement	South Salt Lake	UT			x					x
Tate's Construction Contracting Inc	West Valley City	UT								x
The Brokerage, Inc.	Salt Lake City	UT								x
Thermal Solutions LLC	Springville	UT			x					
Tonks Insulation	Washington	UT			x					
U.N.I. Exteriors	Draper	UT								x
USI Cardalls LLC	Logan	UT			x			x		
USI Cardalls LLC - North Salt Lake City	North Salt Lake City	UT			x			x		
Valley Glass Inc.	Ogden	UT								x
Whitaker Roofing Services	Salt Lake City	UT				x				
White Leaf Enterprises Inc	North Ogden	UT								x
Wholesale Windows and Door, Inc.	Orem	UT								x

Trade Ally Name (Trade ally may be located outside of the territory)	City	State	Air Sealing	Duct Sealing & Insulation	Insulation-Attic	Insulation-Attic,Self-Installed	Insulation-Floor	Insulation-Wall	Insulation-Wall,Self-Installed	Windows
Window World of Utah	Murray	UT								x
Wittes Fine Finish Work	Layton	UT								x

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Manufactured Homes Applications	% of Kits Applications
ABRAHAM	0.00%	0.00%	0.01%	0.00%	0.00%
ALPINE	0.58%	0.40%	0.64%	0.00%	0.74%
AMALGA	0.01%	0.02%	0.01%	0.00%	0.00%
AMERICAN FORK	1.04%	1.34%	0.81%	0.00%	1.11%
ANNABELLA	0.07%	0.04%	0.11%	0.00%	0.00%
APPLE VALLEY	0.13%	0.00%	0.12%	0.00%	0.00%
AURORA	0.05%	0.02%	0.06%	0.00%	0.00%
AVON	0.00%	0.00%	0.01%	0.00%	0.00%
AXTELL	0.01%	0.00%	0.01%	0.00%	0.09%
BEAR RIVER CITY	0.03%	0.02%	0.01%	0.00%	0.00%
BEAVER	0.01%	0.00%	0.02%	0.00%	0.00%
Benjamin	0.04%	0.08%	0.03%	0.00%	0.00%
BENSON	0.01%	0.04%	0.00%	0.00%	0.00%
BLUFF	0.00%	0.00%	0.01%	0.00%	0.00%
BLUFFDALE	1.08%	1.30%	1.23%	0.00%	0.37%
BOTHWELL	0.01%	0.02%	0.00%	0.00%	0.09%
BOUNTIFUL	0.04%	0.04%	0.02%	0.00%	0.18%
BRIGHAM CITY	0.01%	0.00%	0.01%	0.00%	0.00%
BRIGHTON	0.00%	0.02%	0.00%	0.00%	0.00%
BROOKSIDE	0.02%	0.00%	0.03%	0.00%	0.00%
CASTLE DALE	0.03%	0.04%	0.04%	0.00%	0.00%
CEDAR CITY	1.27%	1.00%	1.43%	0.00%	1.66%
CEDAR FORT	0.00%	0.00%	0.01%	0.00%	0.00%
CEDAR HILLS	0.49%	0.70%	0.45%	0.00%	0.09%
CENTERFIELD	0.03%	0.02%	0.04%	0.00%	0.00%
CENTERVILLE	0.85%	1.15%	0.74%	0.00%	0.74%
CENTRAL	0.02%	0.02%	0.02%	0.00%	0.00%
CENTRAL VALLEY	0.06%	0.06%	0.07%	0.00%	0.09%
CHESTER	0.00%	0.00%	0.01%	0.00%	0.00%
CIRCLEVILLE	0.04%	0.02%	0.06%	0.00%	0.00%
CLARKSTON	0.01%	0.04%	0.00%	0.00%	0.00%
CLEARFIELD	0.98%	1.02%	0.93%	0.00%	0.83%
CLEVELAND	0.01%	0.00%	0.01%	0.00%	0.00%
CLINTON	0.80%	0.85%	0.74%	0.00%	0.92%
COALVILLE	0.16%	0.09%	0.04%	0.00%	0.09%
COLLEGE WARD	0.01%	0.02%	0.01%	0.00%	0.00%
COLLINSTON	0.00%	0.00%	0.01%	0.00%	0.00%
COPPERTON	0.01%	0.00%	0.02%	0.00%	0.00%
CORINNE	0.01%	0.00%	0.01%	0.00%	0.00%
COTTONWOOD HEIGHTS	1.96%	1.71%	1.96%	0.00%	2.03%
CROYDON	0.00%	0.00%	0.00%	0.00%	0.09%
DAMMERON VALLEY	0.34%	0.04%	0.41%	0.00%	0.09%
DELTA	0.13%	0.13%	0.16%	0.00%	0.18%
DESERET	0.02%	0.02%	0.01%	0.00%	0.09%
DEWEYVILLE	0.01%	0.02%	0.00%	0.00%	0.09%
DIAMOND VALLEY	0.07%	0.02%	0.07%	0.00%	0.09%
DRAPER	3.82%	2.56%	4.61%	0.00%	3.05%
EAGLE MOUNTAIN	1.02%	1.26%	0.74%	0.00%	1.85%
EAST CARBON	0.02%	0.00%	0.04%	0.00%	0.00%
EDEN	0.11%	0.24%	0.06%	0.00%	0.09%
ELMO	0.03%	0.00%	0.04%	0.00%	0.00%
ELSINORE	0.11%	0.08%	0.13%	0.00%	0.18%
ELWOOD	0.01%	0.02%	0.01%	0.00%	0.09%
EMERY	0.00%	0.00%	0.01%	0.00%	0.00%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Manufactured Homes Applications	% of Kits Applications
ENOCH	0.16%	0.19%	0.12%	0.00%	0.28%
ENTERPRISE	0.00%	0.00%	0.01%	0.00%	0.00%
EPHRAIM	0.00%	0.02%	0.00%	0.00%	0.00%
ERDA	0.12%	0.08%	0.13%	0.00%	0.09%
EUREKA	0.00%	0.02%	0.00%	0.00%	0.00%
FARMINGTON	1.08%	1.73%	0.79%	0.00%	1.20%
FARR WEST	0.25%	0.47%	0.17%	0.65%	0.18%
FAYETTE	0.01%	0.00%	0.01%	0.00%	0.00%
FERRON	0.01%	0.00%	0.01%	0.00%	0.00%
FIELDING	0.00%	0.00%	0.01%	0.00%	0.00%
FOUNTAIN GREEN	0.01%	0.04%	0.01%	0.00%	0.00%
FRANCIS	0.05%	0.15%	0.01%	0.00%	0.18%
FRUIT HEIGHTS	0.20%	0.30%	0.17%	0.00%	0.00%
GARDEN CITY	0.03%	0.04%	0.03%	0.00%	0.00%
GARLAND	0.04%	0.06%	0.00%	0.00%	0.18%
GENOLA	0.02%	0.00%	0.03%	0.00%	0.00%
Glendale	0.00%	0.00%	0.01%	0.00%	0.00%
GLENWOOD	0.03%	0.02%	0.04%	0.00%	0.00%
GOSHEN	0.02%	0.00%	0.04%	0.00%	0.00%
GRANTSVILLE	0.36%	0.49%	0.39%	0.00%	0.09%
GREEN RIVER	0.00%	0.00%	0.01%	0.00%	0.00%
GUNLOCK	0.06%	0.00%	0.07%	0.00%	0.00%
GUNNISON	0.05%	0.02%	0.08%	0.00%	0.00%
HARRISVILLE	0.37%	0.24%	0.44%	0.00%	0.37%
HEBER CITY	0.00%	0.00%	0.00%	0.00%	0.09%
HELPER	0.02%	0.00%	0.02%	0.00%	0.09%
HENEFER	0.02%	0.06%	0.00%	0.00%	0.00%
HERRIMAN	2.90%	2.79%	3.48%	0.00%	1.20%
HIDEOUT	0.02%	0.06%	0.00%	0.00%	0.09%
HIGHLAND	0.91%	1.11%	0.89%	0.00%	0.18%
HINCKLEY	0.03%	0.02%	0.04%	0.00%	0.00%
HOLDEN	0.00%	0.00%	0.01%	0.00%	0.00%
HOLIDAY	0.00%	0.00%	0.01%	0.00%	0.00%
HOLLADAY	1.47%	1.58%	1.39%	0.00%	1.02%
HONEYVILLE	0.02%	0.02%	0.01%	0.00%	0.00%
HOOPER	0.38%	0.68%	0.29%	0.00%	0.18%
HOWELL	0.01%	0.02%	0.01%	0.00%	0.00%
HOYTSVILLE	0.05%	0.06%	0.00%	0.00%	0.00%
HUNTINGTON	0.03%	0.06%	0.03%	0.00%	0.09%
HUNTSVILLE	0.07%	0.17%	0.06%	0.00%	0.00%
HURRICANE	0.16%	0.00%	0.00%	24.18%	0.09%
HYDE PARK	0.08%	0.23%	0.02%	0.00%	0.18%
INDIANOLA	0.01%	0.00%	0.01%	0.00%	0.00%
IVINS	0.50%	0.21%	0.57%	0.00%	0.37%
JOSEPH	0.05%	0.02%	0.08%	0.00%	0.00%
JUNCTION	0.03%	0.02%	0.05%	0.00%	0.00%
KAMAS	0.10%	0.30%	0.01%	0.00%	0.55%
KANARRAVILLE	0.00%	0.02%	0.00%	0.00%	0.00%
KANESVILLE	0.00%	0.02%	0.00%	0.00%	0.00%
KAYSVILLE	0.03%	0.04%	0.02%	0.00%	0.09%
KEARNS	1.23%	1.09%	1.37%	0.00%	0.46%
KENILWORTH	0.01%	0.00%	0.01%	0.00%	0.09%
KINGSTON	0.02%	0.00%	0.04%	0.00%	0.00%
LA VERKIN	0.11%	0.02%	0.12%	0.00%	0.37%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Manufactured Homes Applications	% of Kits Applications
LAKE POINT	0.03%	0.04%	0.04%	0.00%	0.00%
LAYTON	3.41%	4.24%	3.07%	5.88%	2.96%
LEAMINGTON	0.01%	0.02%	0.01%	0.00%	0.00%
LEEDS	0.18%	0.08%	0.22%	0.00%	0.00%
LEHI	0.06%	0.17%	0.01%	0.00%	0.00%
LEVAN	0.00%	0.02%	0.00%	0.00%	0.00%
LEWISTON	0.03%	0.04%	0.01%	0.00%	0.28%
LIBERTY	0.05%	0.11%	0.04%	0.00%	0.09%
LINCOLN	0.03%	0.02%	0.03%	0.00%	0.00%
LINDON	0.49%	0.87%	0.38%	0.00%	0.74%
LOGAN	0.00%	0.00%	0.01%	0.00%	0.00%
LYNNDYL	0.00%	0.00%	0.01%	0.00%	0.00%
MAGNA	0.83%	0.73%	0.90%	0.00%	0.28%
MANDERFIELD	0.00%	0.00%	0.01%	0.00%	0.00%
MANTUA	0.03%	0.08%	0.03%	0.00%	0.00%
MAPLETON	0.24%	0.45%	0.20%	0.00%	0.18%
MARRIOTT SLATERVILLE	0.09%	0.19%	0.06%	0.00%	0.09%
MARRIOTT-SLATERVILLE	0.01%	0.00%	0.00%	0.00%	0.00%
MARYSVALE	0.05%	0.00%	0.08%	0.00%	0.09%
MAYFIELD	0.01%	0.00%	0.01%	0.00%	0.00%
MCCORNICK	0.00%	0.00%	0.00%	0.00%	0.00%
MENDON	0.04%	0.08%	0.04%	0.00%	0.00%
MIDVALE	2.00%	0.88%	2.71%	0.00%	1.57%
MIDWAY	0.01%	0.04%	0.00%	0.00%	0.00%
MILFORD	0.13%	0.00%	0.11%	0.00%	0.09%
MILLCREEK CANYON	0.00%	0.00%	0.00%	0.00%	0.09%
MILLVILLE	0.03%	0.08%	0.01%	0.00%	0.09%
MINERSVILLE	0.03%	0.02%	0.04%	0.00%	0.00%
MOAB	0.21%	0.08%	0.24%	0.00%	1.02%
MONA	0.03%	0.06%	0.01%	0.00%	0.28%
MONROE	0.04%	0.02%	0.06%	0.00%	0.00%
Morgan	0.10%	0.13%	0.04%	0.00%	0.09%
MORONI	0.02%	0.04%	0.01%	0.00%	0.00%
MOUNTAIN GREEN	0.27%	0.49%	0.22%	0.00%	0.09%
MT PLEASANT	0.00%	0.02%	0.00%	0.00%	0.00%
MURRAY	0.75%	0.60%	0.75%	0.00%	0.65%
NAPLES	0.00%	0.00%	0.00%	0.00%	0.00%
NEPHI	0.01%	0.04%	0.00%	0.00%	0.00%
NEW HARMONY	0.02%	0.02%	0.01%	0.00%	0.09%
NEWTON	0.03%	0.04%	0.03%	0.00%	0.00%
NIBLEY	0.13%	0.17%	0.10%	0.00%	0.74%
NORTH LOGAN	0.24%	0.38%	0.12%	0.00%	1.20%
NORTH OGDEN	0.80%	1.04%	0.69%	0.00%	0.65%
NORTH SALT LAKE	1.07%	1.15%	1.14%	0.00%	0.65%
OAKLEY	0.04%	0.09%	0.02%	0.00%	0.18%
OASIS	0.01%	0.02%	0.01%	0.00%	0.00%
OGDEN	3.45%	2.69%	3.72%	0.00%	2.59%
ORANGEVILLE	0.03%	0.00%	0.05%	0.00%	0.00%
OREM	3.23%	4.39%	2.69%	0.00%	4.16%
PANGUITCH	0.02%	0.04%	0.01%	0.00%	0.00%
PARADISE	0.01%	0.02%	0.01%	0.00%	0.00%
PARK CITY	0.81%	1.21%	0.48%	0.00%	4.16%
PAROWAN	0.01%	0.00%	0.02%	0.00%	0.00%
PEOA	0.01%	0.02%	0.01%	0.00%	0.09%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Manufactured Homes Applications	% of Kits Applications
PERRY	0.13%	0.34%	0.04%	0.00%	0.09%
PETERSBORO	0.00%	0.02%	0.00%	0.00%	0.00%
PLAIN CITY	0.32%	0.53%	0.26%	0.00%	0.55%
PLEASANT GROVE	1.35%	2.13%	1.09%	0.00%	1.02%
PLEASANT VIEW	0.50%	0.64%	0.46%	0.00%	0.37%
PLYMOUTH	0.01%	0.00%	0.01%	0.00%	0.09%
PRICE	0.07%	0.11%	0.06%	0.00%	0.00%
PROVIDENCE	0.15%	0.34%	0.07%	0.00%	0.37%
PROVO CANYON	0.03%	0.00%	0.03%	0.00%	0.09%
RANDOLPH	0.00%	0.00%	0.01%	0.00%	0.00%
REDMOND	0.03%	0.04%	0.04%	0.00%	0.00%
RICHFIELD	0.48%	0.17%	0.65%	0.00%	0.74%
RICHMOND	0.06%	0.15%	0.03%	0.00%	0.18%
RIVER HEIGHTS	0.07%	0.06%	0.06%	0.00%	0.46%
RIVERDALE	0.33%	0.24%	0.39%	0.65%	0.00%
RIVERSIDE	0.01%	0.04%	0.00%	0.00%	0.00%
RIVERTON	2.11%	2.67%	1.73%	0.00%	1.76%
ROCKVILLE	0.03%	0.00%	0.01%	0.00%	0.00%
ROCKY RIDGE	0.01%	0.00%	0.01%	0.00%	0.09%
ROY	2.30%	1.28%	2.09%	67.97%	1.02%
RUSH VALLEY	0.01%	0.00%	0.02%	0.00%	0.00%
SALINA	0.17%	0.02%	0.26%	0.00%	0.28%
SALT LAKE CITY	10.42%	8.42%	10.80%	0.00%	12.38%
SANDY	5.50%	4.90%	5.25%	0.00%	4.44%
SANTAQUIN	0.23%	0.55%	0.07%	0.00%	0.92%
SARATOGA SPRINGS	0.69%	1.37%	0.48%	0.00%	0.92%
SCIPIO	0.02%	0.00%	0.03%	0.00%	0.00%
SCOFIELD	0.01%	0.02%	0.00%	0.00%	0.00%
SEVIER	0.02%	0.00%	0.03%	0.00%	0.00%
SIGURD	0.02%	0.00%	0.04%	0.00%	0.00%
SKULL VALLEY	0.00%	0.00%	0.01%	0.00%	0.00%
SMITHFIELD	0.16%	0.28%	0.07%	0.00%	0.28%
SNOWVILLE	0.01%	0.02%	0.01%	0.00%	0.09%
SNYDERVILLE	0.15%	0.30%	0.05%	0.00%	0.74%
SO Jordan	0.00%	0.00%	0.01%	0.00%	0.00%
So. Jordan	0.01%	0.00%	0.01%	0.00%	0.00%
SOUTH JORDAN	3.91%	4.86%	3.49%	0.00%	2.96%
SOUTH OGDEN	0.93%	0.73%	0.95%	0.00%	0.65%
SOUTH SALT LAKE	1.86%	0.70%	2.62%	0.00%	1.20%
SOUTH WEBER	0.43%	0.83%	0.27%	0.00%	0.37%
SPRING GLEN	0.01%	0.02%	0.01%	0.00%	0.00%
SPRINGDALE	0.01%	0.00%	0.01%	0.00%	0.09%
St. George	0.01%	0.00%	0.01%	0.00%	0.00%
STANSBURY PARK	1.05%	0.56%	1.45%	0.00%	0.28%
STERLING	0.02%	0.04%	0.01%	0.00%	0.00%
STOCKTON	0.04%	0.11%	0.02%	0.00%	0.00%
SUMMIT	0.00%	0.02%	0.00%	0.00%	0.00%
SUMMIT COUNTY	0.11%	0.26%	0.01%	0.00%	0.65%
SUNSET	0.18%	0.19%	0.20%	0.00%	0.09%
SUTHERLAND	0.01%	0.02%	0.01%	0.00%	0.09%
SYRACUSE	1.44%	2.35%	1.25%	0.00%	1.29%
TAYLOR	0.05%	0.08%	0.04%	0.00%	0.18%
TAYLORSVILLE	3.28%	2.24%	3.79%	0.00%	2.87%
TINTIC	0.00%	0.00%	0.01%	0.00%	0.00%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Manufactured Homes Applications	% of Kits Applications
TOOELE	1.33%	1.05%	1.56%	0.00%	0.92%
TOQUERVILLE	0.10%	0.02%	0.11%	0.00%	0.09%
TREMONTON	0.48%	0.23%	0.65%	0.00%	0.28%
TRENTON	0.01%	0.02%	0.01%	0.00%	0.00%
UINTAH	0.15%	0.15%	0.14%	0.65%	0.18%
UPTON	0.00%	0.00%	0.00%	0.00%	0.00%
VENICE	0.03%	0.00%	0.06%	0.00%	0.00%
VERNAL	0.22%	0.23%	0.04%	0.00%	2.96%
VERNON	0.01%	0.02%	0.01%	0.00%	0.00%
VEYO	0.02%	0.00%	0.03%	0.00%	0.00%
VINEYARD	0.07%	0.23%	0.00%	0.00%	0.37%
VIRGIN	0.00%	0.02%	0.00%	0.00%	0.00%
W Jordan	0.00%	0.00%	0.01%	0.00%	0.00%
WALES	0.02%	0.02%	0.02%	0.00%	0.09%
WALLSBURG	0.01%	0.02%	0.00%	0.00%	0.09%
WANSHIP	0.01%	0.06%	0.00%	0.00%	0.00%
WASATCH COUNTY	0.05%	0.17%	0.00%	0.00%	0.28%
WASHINGTON TERRACE	0.42%	0.32%	0.51%	0.00%	0.09%
WELLINGTON	0.03%	0.00%	0.04%	0.00%	0.09%
WELLSVILLE	0.10%	0.13%	0.05%	0.00%	0.37%
WEST BOUNTIFUL	0.25%	0.47%	0.11%	0.00%	0.37%
WEST HAVEN	0.53%	1.13%	0.32%	0.00%	0.46%
WEST JORDAN	5.79%	5.10%	6.34%	0.00%	5.08%
WEST POINT	0.53%	0.66%	0.50%	0.00%	0.18%
West Valley	0.04%	0.02%	0.06%	0.00%	0.00%
WEST VALLEY CITY	4.45%	3.75%	5.05%	0.00%	4.16%
WEST WEBER	0.03%	0.04%	0.04%	0.00%	0.00%
WILLARD	0.10%	0.21%	0.06%	0.00%	0.09%
WINCHESTER HILLS	0.13%	0.00%	0.14%	0.00%	0.00%
WOODRUFF	0.01%	0.02%	0.01%	0.00%	0.00%
WOODS CROSS	0.38%	0.58%	0.29%	0.00%	0.28%
WVC	0.01%	0.00%	0.01%	0.00%	0.00%
YOUNG WARD	0.00%	0.00%	0.01%	0.00%	0.00%

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Appendix 5

*watt*smart Business Trade Allies

Energy Efficiency Alliance

The following is a list of contractors, distributors and other businesses participating in Rocky Mountain Power's Energy Efficiency Alliance 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.

An asterisk (*) indicates Rocky Mountain Power Outstanding Contribution Award winning trade allies in 2013, 2014 and/or 2015.

Search Criteria:

Selected State(s):	Utah
Specialties:	HVAC - evaporative HVAC - unitary
Business Type:	--ANY--

Search Results: 75 - Date and Time: 03/30/2017 02:49:27 PM

	Specialties	Business Type	Join Date	Projects Completed
Contractors HVAC Supply 2468 S. 1760 W Ogden, UT - 84401 Phone: 801-487-8565 Website: contractorshvacsupply.com	HVAC - unitary	Distributor	07/01/2010	
Redd Mechanical Incorporated 1012 SOUTH 300 WEST BLANDING, UT - 84511 Phone: 435-678-2500 x 2500 Website: www.reddmechanical.com	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	07/02/2015	
DesignTek Consulting Group, LLC 1600 W. 2200 S. Salt Lake City, UT - 84119 Phone: 801-255-5449 Website: www.designtekconsulting.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor Engineering Firm	11/11/2013	
RealWinWin, Inc. 1926 Arch Street, 4F Philadelphia, PA - 19103 Phone: 215-732-4480 x 349 Website: www.realwinwin.com	Appliances Building envelope Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	Other: Energy Efficiency Incentive Administration and Consultation	10/14/2013	43
Riverside Plumbing & Htg, Inc. 366 N 500 W Moab, UT - 84532 Phone: 435-259-8324	HVAC - unitary Motors and VFDs	Contractor	11/01/2005	
Budget Plumbing & Rooter LLC 390 W Main American Fork, UT - 84003 Phone: 801-763-5775 Website: www.budgetknowsplumbing.com	Controls HVAC - evaporative HVAC - unitary	Contractor	01/08/2016	
Contractors HVAC Supply West Jordan, UT - Phone: 801-613-3230 Website: contractorshvacsupply.com	HVAC - unitary	Distributor	07/01/2010	
Coolerado Corporation 4700 W. 60th Ave., Ste. 3 Arvada, CO - 80003 Phone: 303-375-0878 Website: coolerado.com	HVAC - evaporative HVAC - unitary	Distributor Manufacturer - Rep	03/01/2007	

Energy Efficiency Alliance

Modern Mechanical LLC 1501 West 2650 South Ste 103 Ogden, UT - 84401 Phone: 801-731-0337 Website: www.modernmechanicalutah.com	**Specialties** Appliances Compressed Air Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 08/14/2014	**Projects Completed**
Contractors HVAC Supply 1433 West130 South orem, UT - 84058 Phone: 435-725-0019 Website: contractorshvacsupply.com	**Specialties** HVAC - unitary	**Business Type** Distributor	**Join Date** 07/01/2010	**Projects Completed**
Architectural Nexus, Inc. 2505 East Parleys Way Salt Lake City, UT - 84109 Phone: 801-924-5000 Website: www.archnexus.com	**Specialties** Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	**Business Type** Architect	**Join Date** 08/18/2014	**Projects Completed**
Allred's Incorporated - Logan 642 North 1000 West Unit # 104 Logan, UT - 84321 Phone: 435-774-1200 Website: www.allreds.net	**Specialties** HVAC - unitary	**Business Type** Distributor	**Join Date** 05/11/2011	**Projects Completed**
KHI Mechanical 2630 S 3270 W Ste B Salt Lake City, UT - 84119 Phone: 801-972-2680	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 01/01/2009	**Projects Completed**
Engineering Economics, Inc. 780 Simms Street Suite 210 Golden, CO - 80401 Phone: 800-869-6902	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary	**Business Type** Engineering Firm	**Join Date** 01/20/2014	**Projects Completed**
Gray Wolf Mechanical LLC P.O. Box 505 Provo, UT - 84603 Phone: 801-805-6531 Website: Graywolfair.com	**Specialties** HVAC - evaporative HVAC - unitary	**Business Type** Contractor	**Join Date** 11/12/2015	**Projects Completed**
SUMMA Energy Services 250 N 200 W Hyrum, UT - 84319 Phone: 435-245-6120 Website: summaenergy.com	**Specialties** HVAC - unitary Motors and VFDs Other: Other Specialty	**Business Type** Other	**Join Date** 01/01/2009	**Projects Completed**
Forced Aire HVAC 1384 N Angel Street Layton, UT - 84041 Phone: 801-593-8265 Website: http:www.forcedaire.com	**Specialties** HVAC - evaporative	**Business Type** Contractor	**Join Date** 08/28/2015	**Projects Completed**
Rocky Mountain Mechanical 3412 S. West Temple Salt Lake City, UT - 84115 Phone: 801-997-0585 Website: www.automatedutah.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 03/08/2016	**Projects Completed**
Van Boerum & Frank Associates 330 South 300 East Salt Lake City, UT - 84111 Phone: 801-530-3148 Website: www.vbfa.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Architect Engineering Firm Other	**Join Date** 01/01/2012	**Projects Completed**

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Mark and Delaun Enterprises Inc. 55 E Center St. Suite 140 Heber City, UT - 84032 Phone: 435-654-4623 Website: www.heberappliance.com	**Specialties** Appliances HVAC - evaporative	**Business Type** Contractor	**Join Date** 06/23/2015	**Projects Completed**
Honeywell International 2371 S. Presidents Way Suite A Salt Lake City, UT - 84120 Phone: 801-978-7136 Website: honeywell.com	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor Distributor Manufacturer - Rep	**Join Date** 05/01/2006	**Projects Completed**
Case, Lowe & Hart, Inc. 2484 Washington Blvd. Suite 510, Ogden, UT - 84401 Phone: 801-399-5821 Website: www.clhae.com	**Specialties** Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Architect Engineering Firm	**Join Date** 05/17/2013	**Projects Completed**
Hussmann Corporation 1385 W 2200 St Salt Lake City, UT - 84119 Phone: 805-458-7615 Website: hussmann.com	**Specialties** Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Manufacturer - Rep	**Join Date** 01/14/2015	**Projects Completed**
Harris Mechanical Intermountain 1925 South Milestone Drive Suite E, Salt Lake City, UT - 84104 Phone: 801-433-2640 Website: www.hmcc.com	**Specialties** HVAC - evaporative HVAC - unitary	**Business Type** Contractor	**Join Date** 01/27/2014	**Projects Completed**
Prettyman Electric 5901 S. Jonquil Drive 5901 S. Jonquil Drive, Taylorsville, UT - 84129 Phone: 801-243-4055	**Specialties** Appliances Building envelope Compressed Air Controls Food Service HVAC - unitary Irrigation Motors and VFDs	**Business Type** Contractor Other: Design Build, Repair, Service, Maintenance	**Join Date** 12/05/2013	**Projects Completed**
Trane* 2817 S. 1030 W. Salt Lake City, UT - 84119 Phone: 801-486-0500 Website: www.trane.com	**Specialties** Controls HVAC - unitary Motors and VFDs	**Business Type** Distributor Manufacturer - Rep	**Join Date** 03/01/2005	**Projects Completed**
Gray Wolf Mechanical LLC P.O. Box 505 Provo, UT 84603, Mapleton, UT - 84664 Phone: 801-805-6531 Website: Graywolfair.com	**Specialties** HVAC - evaporative HVAC - unitary	**Business Type** Contractor	**Join Date** 10/23/2015	**Projects Completed**
Engineered Systems Assoc., Inc. 1355 E. Center Street Pocatello, ID - 83201 Phone: 208-233-0501	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 01/10/2014	**Projects Completed**
Smart Building Solutions 2876 South 460 West Salt Lake City, UT - 84115 Phone: 801-733-6000 Website: www.intellivex.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment Other: Other Specialty	**Business Type** Distributor Manufacturer - Rep	**Join Date** 03/04/2015	**Projects Completed**

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PVE, Inc* 1040 North 2200 West, Suite 100 Salt Lake City, UT - 84107 Phone: 801-359-3158	**Specialties** Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 07/29/2013	**Projects Completed**
Utah Engineering 145 W. 2950 S. Salt Lake City, UT - 84115 Phone: 801-466-3583 Website: samedayutah.com	**Specialties** Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 12/24/2013	**Projects Completed**
Contractors HVAC Supply 3145 S. Washington Street Salt Lake City, UT - 84115 Phone: 801-487-8565 Website: contractorshvacsupply.com	**Specialties** HVAC - unitary	**Business Type** Distributor	**Join Date** 07/01/2010	**Projects Completed**
Hidden Peak Electric Company Inc. 1064 South 700 West Salt lake City, UT - 84104 Phone: 801-262-5513 Website: www.hiddenpeakelectric.com	**Specialties** Controls HVAC - unitary Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 02/14/2013	**Projects Completed** 2
Johnson Controls, Inc. 2255 Technology Parkway West Valley City, UT - 84119 Phone: 801-903-7532	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor Manufacturer - Rep	**Join Date** 06/01/2007	**Projects Completed**
Provident Energy, INC. 2882 N. 1300 E. North Ogden, UT - 84414 Phone: 801-668-7910	**Specialties** Appliances Building envelope HVAC - evaporative HVAC - unitary Lighting	**Business Type** Contractor Other: Energy Rating & Consulting	**Join Date** 02/15/2016	**Projects Completed**
Commercial Mechanical Systems & Service 3395 West 1820 South Salt Lake City, UT - 84104 Phone: 801-977-3925 Website: cmsutah.com	**Specialties** HVAC - unitary Motors and VFDs Other: Other Specialty	**Business Type** Contractor	**Join Date** 02/01/2012	**Projects Completed**
Gustave A. Larson Company 210 W. Crosswood Square Salt Lake City, UT - 84115 Phone: 801-487-0644 Website: galarson.com	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Distributor	**Join Date** 02/01/2007	**Projects Completed**
USAirconditioning Distributors 375 W 2100 South Salt Lake City, UT - 84115 Phone: 801-485-8071 Website: utahhvac.com	**Specialties** HVAC - unitary	**Business Type** Distributor	**Join Date** 10/01/2008	**Projects Completed**
American Mechanical Systems Service, LLC 7530 South State Street Midvale, UT - 84047 Phone: 801-428-0400 Website: www.ams-ut.com	**Specialties** Controls HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 11/30/2012	**Projects Completed**
Gunthers Comfort Air* 81 S 700 E American Fork, UT - 84003 Phone: 801-756-9683 Website: gunterscomfortair.com	**Specialties** HVAC - unitary	**Business Type** Contractor	**Join Date** 08/01/2004	**Projects Completed**

Energy Efficiency Alliance

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	Specialties	Business Type	Join Date	Projects Completed
Lux Energy Group 1111 South 120 East Farmington, UT - 84025 Phone: 801-989-8375	Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Engineering Firm Other: Energy Resource Managers	10/13/2015	
Optica Energy Management, LLC 1772 Ross Dr Ogden, UT - 84403 Phone: 888-442-4866 Website: www.opticaenergy.com	HVAC - unitary Lighting Motors and VFDs	Distributor Other: Energy Management Company	04/11/2013	17
Mountain West Mechanical 2336 W. 5200 S. Rexburg, ID - 83440 Phone: 208-356-0370 Website: www.mountainwestmechanical.com	HVAC - evaporative HVAC - unitary	Contractor	03/17/2014	
Mechanical Products Intermountain 198 W. CottageAve Sandy, UT - 84070 Phone: 801-352-9003 Website: mp-int.com	Controls HVAC - evaporative HVAC - unitary	Distributor Manufacturer - Rep	06/01/2008	
WHW Engineering Inc. 8619 Sandy Parkway #101 Sandy, UT - 84070 Phone: 801-466-4021	HVAC - evaporative HVAC - unitary Motors and VFDs	Engineering Firm	02/23/2015	
EME, Inc 2496 S West Temple Salt Lake City , UT - 84115 Phone: 801-746-2828 Website: www.EMEUtah.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	06/06/2016	
Johnson Powers, LLC 8704 South 120 East Sandy, UT - 84070 Phone: 801-878-7831 Website: www.johnsonpowers.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor	07/23/2014	
Sammy's Heating and Air 935 E. 1150 N. Bountiful, UT - 84010 Phone: 801-698-0096 Website: sammyshvac.com	HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	11/02/2015	
PPM Plumbing, Heating & Cooling 864 North 1430 West Orem, UT - 84058 Phone: 801-226-3033	HVAC - unitary	Contractor	06/01/2004	
Energy Management Corporation* 501 West 700 South Salt Lake City, UT - 84101 Phone: 801-366-4100 Website: emcsolutions.com	HVAC - unitary Motors and VFDs	Distributor	05/01/2004	
Utah Yamas Controls Inc.* 13526 S. 110 W. Draper, UT - 84020 Phone: 801-990-1950 Website: www.utahyamas.com	Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	Contractor Distributor Engineering Firm Manufacturer - Rep	01/21/2013	1

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Lennox 1008 W 2780 S Salt Lake City, UT - 84119 Phone: 801-556-6114 Website: lennoxcommercial.com	**Specialties** HVAC - unitary	**Business Type** Distributor	**Join Date** 11/01/2005	**Projects Completed**
Nelson's Heating & Refrigeration 1070 Bowling Alley Ln. Moab, UT - 84532 Phone: 435-259-5625	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 12/01/2005	**Projects Completed**
Encentiv Energy, LLC 1501 Ardmore Blvd. Suite 102, Pittsburgh, PA - 15221 Phone: 412-723-1516 Website: www.encentivenergy.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Other: Energy Efficiency Analytics Other: Energy Efficiency Rebate Processing	**Join Date** 11/11/2015	**Projects Completed** 1
Cedar Valley Heating & Air Conditioning, Inc. 1400 N. Main, Bldg A Cedar City, UT - 84721 Phone: 435-586-8788 Website: cedarvalleyheatingandair.com	**Specialties** HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 05/18/2016	**Projects Completed**
Acx Service 563 Ogden Canyon Ogden, UT - 84401 Phone: 385-325-2295 Website: acxservice.com	**Specialties** Appliances Building envelope Compressed Air Controls Farm and Dairy Food Service HVAC - evaporative HVAC - unitary Irrigation Motors and VFDs Office Equipment Other: Other Specialty	**Business Type** Contractor Other: Energy Audits & Commissioning	**Join Date** 04/14/2015	**Projects Completed**
United Team Mechanical 151 N 600 W Kaysville, UT - 84037 Phone: 801-991-1145	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 09/01/2005	**Projects Completed**
Nebo Comfort Systems 210 E 800 S Genola, UT - 84655 Phone: 801-465-2709	**Specialties** HVAC - unitary	**Business Type** Contractor	**Join Date** 10/03/2013	**Projects Completed**
Green Planet Company 63 East 11400 South #257 Sandy , UT - 84070 Phone: 801-980-1518 Website: www.greenplanetcompany.com	**Specialties** Appliances HVAC - unitary Lighting Motors and VFDs	**Business Type** Distributor Manufacturer - Rep	**Join Date** 05/07/2014	**Projects Completed** 14
Midgley-Huber, Inc.* 2465 Progress Drive Salt Lake City, UT - 84119 Phone: 801-972-5011 Website: Migley-huber.com	**Specialties** HVAC - evaporative HVAC - unitary	**Business Type** Manufacturer - Rep	**Join Date** 05/01/2007	**Projects Completed**
Jacobs Engineering Group, Inc. 3 Tower Bridge 2 Ash Street, Conshohocken, PA - 19428 Phone: 610-238-1000 Website: www.Jacobs.com	**Specialties** Building envelope Compressed Air HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	**Business Type** Engineering Firm	**Join Date** 05/08/2015	**Projects Completed**

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Precision Air Management, LLC 1388 South 350 West Lehi, UT - 84043 Phone: 801-360-1848 Website: precisionairmgmt.com	**Specialties** Controls HVAC - unitary Motors and VFDs Office Equipment	**Business Type** Contractor	**Join Date** 11/24/2015	**Projects Completed**
Siemens Industry, Inc. 9707 S Sandy Parkway Sandy, UT - 84070 Phone: 801-316-2439	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Irrigation Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 01/11/2013	**Projects Completed** 1
McKinstry Essention, LLC 112 N. Rubey Dr. Suite 200, Golden, CO - 80403 Phone: 435-632-8433 Website: www.mckinstry.com	**Specialties** Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Irrigation Motors and VFDs Other: Other Specialty	**Business Type** Engineering Firm	**Join Date** 02/12/2014	**Projects Completed**
Aspen Engineering and Environmental LLC 140 Aspen Circle Park City, UT - 84098 Phone: 435-565-1535 Website: www.a2e-llc.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 03/18/2013	**Projects Completed**
Colvin Engineering Associates, Inc. 244 W 300 N Suite 200, Salt Lake City, UT - 84103 Phone: 801-322-2400	**Specialties** Controls HVAC - evaporative HVAC - unitary Other: Other Specialty	**Business Type** Architect Engineering Firm	**Join Date** 04/29/2013	**Projects Completed**
MKK Consulting Engineers Inc. 4760 S. Highland Drive Suite 106 Salt Lake City, UT - 84115 Phone: 303-796-6000	**Specialties** Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 01/18/2016	**Projects Completed**
Mechanical Service & Systems, Inc. 1055 South 700 West Salt Lake City, UT - 84104 Phone: 801-255-9333 x 1 Website: www.mss84.com	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 08/01/2006	**Projects Completed** 2
B. Jackson Construction 4188 West Nike Drive West Jordan, UT - 84088 Phone: 801-260-0988	**Specialties** HVAC - unitary Lighting	**Business Type** Contractor	**Join Date** 06/01/2010	**Projects Completed** 6
Engineering System Solutions DBA ES2 4943 N 29 E Suite A Idaho Falls, ID - 83401 Phone: 208-552-9874 Website: www.es2eng.com	**Specialties** Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 05/08/2014	**Projects Completed**
HD Supply Facilities Maintenance, Ltd. 10641 Scripps Summit Court San Diego, CA - 92131 Phone: 858-831-2231 Website: www.hdsupplysolutions.com	**Specialties** Appliances HVAC - evaporative HVAC - unitary	**Business Type** Distributor	**Join Date** 01/22/2014	**Projects Completed**

Energy Efficiency Alliance

Applied Product Solutions 2822 South 1030 West Salt Lake City, UT - 84119 Phone: 801-441-4949 Website: www.aps.hvacinfo.com	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Manufacturer - Rep	**Join Date** 11/17/2015	**Projects Completed**
Comfort Systems USA Intermountain 2035 Milestone Dr. Suite A Salt Lake City, UT - 84104 Phone: 801-907-6700 Website: comfortsystemsutah.com	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 06/30/2014	**Projects Completed**
Royal Engineering, Inc. 2335 S. State Street Suite 100, Provo, UT - 84606 Phone: 801-375-2228 Website: www.royaleng.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 12/31/2014	**Projects Completed**
Musgrove Engineering, PA 234 Whisperwood Way ` , Boise, ID - 83709 Phone: 208-384-0585 Website: musgrovepa.com	**Specialties** Compressed Air Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs Office Equipment	**Business Type** Engineering Firm	**Join Date** 07/28/2015	**Projects Completed**

Energy Efficiency Alliance

The following is a list of contractors, distributors and other businesses participating in Rocky Mountain Power's Energy Efficiency Alliance 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.

An asterisk (*) indicates Rocky Mountain Power Outstanding Contribution Award winning trade allies in 2013, 2014 and/or 2015.

Search Criteria:

Selected State(s):	Utah
Specialties:	Lighting
Business Type:	--ANY--

Search Results: 173 - Date and Time: 03/30/2017 02:47:44 PM

A-C Electric Inc. 729 South 330 West Salt Lake City, UT - 84101 Phone: 801-364-1747 Website: CampbellAndBruce.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 04/03/2003	**Projects Completed** 55
AD-Lite Electric Inc. 2802 W. 3500 So. West Valley, UT - 84119 Phone: 801-856-4555	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 03/06/2006	**Projects Completed** 7
Advanced Energy Lighting Technology 146 N. Old Highway 91 Suite 4 Hurricane,, UT - 84737 Phone: 435-703-0711	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 06/06/2006	**Projects Completed** 44
Advanced Lighting, Inc. - Utah* 3099 south 1030 west Salt Lake City, UT - 84119 Phone: 801-972-9530 Website: www.advlight.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 07/04/2004	**Projects Completed** 381
All American LED, LLC 3234 E 4650 N Liberty, UT - 84310 Phone: 801-920-7276 Website: www.All-AmericanLED.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 12/18/2012	**Projects Completed** 50
All Electric Plus, Inc. 182 S. 200 West Paragonah, UT - 94160 Phone: 435-477-9591 Website: www.allelectricplus.com	**Specialties** Controls Farm and Dairy Irrigation Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/03/2014	**Projects Completed** 2
American Electric Company, Inc. 78 West 13775 South, Suite 9 Draper, UT - 84020 Phone: 801-254-0782 Website: www.americanelectric.cc	**Specialties** Appliances Building envelope Controls Lighting Motors and VFDs Other: Other Specialty	**Business Type** Contractor	**Join Date** 04/06/2015	**Projects Completed**
Amos and Connors Sales 1323 West 7900 South suite #107 West Jordan, UT - 84088 Phone: 801-565-8919 Website: www.amosandconnors.com	**Specialties** Lighting	**Business Type** Manufacturer - Rep	**Join Date** 07/10/2015	**Projects Completed**

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

	Specialties	Business Type	Join Date	Projects Completed
Architectural Nexus, Inc. 2505 East Parleys Way Salt Lake City, UT - 84109 Phone: 801-924-5000 Website: www.archnexus.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	Architect	08/18/2014	
Arco Electric, Inc. - Utah 597 West 9320 South Sandy, UT - 84070 Phone: 801-566-1695	Lighting	Contractor	09/21/2012	1
B. Jackson Construction 4188 West Nike Drive West Jordan, UT - 84088 Phone: 801-260-0988	HVAC - unitary Lighting	Contractor	06/01/2010	6
Bastion Technologies, LLC 175 W 7065 S Midvale, UT - 84047 Phone: 800-328-6024 Website: www.bastiontech.com	Lighting	Distributor Manufacturer - Rep Other: consultant	07/30/2014	24
Batteries Plus Bulbs (#909) 2731 S 5600 W Ste. D, West Valley City, UT - 84120 Phone: 801-965-6000 x 3 Website: www.batteriesplusbulbs.com	Lighting	Distributor Other: Commercial/Industrial Lamp Sales	09/01/2016	
Batteries Plus Bulbs 848 - Lehi 770 East Main Street, Suite E Lehi, UT - 84043 Phone: 801-372-3249 Website: www.batteriesplusbulbs.com	Lighting	Distributor	10/28/2013	5
BKJ Holdings, LLC 3458 E Fairway Lane Spanish Fork, UT - 84660 Phone: 801-636-5969	Lighting	Distributor Manufacturer - Rep	01/06/2015	2
Bleu Skye, LLC 1901 Ryan Park Ave Sandy, UT - 84092 Phone: 801-557-1800 Website: www.bleuskyeservices.com	Controls Lighting	Contractor	07/24/2014	
BNA Consulting 635 South State Street Salt Lake City, UT - 84111 Phone: 801-532-2196 Website: www.bnaconsulting.com	Lighting	Other	05/10/2010	
Bright Star Energy Management, LLC 214 S. Cole Rd. Boise, ID - 83709 Phone: 208-922-6460 Website: brightstarenergy.net	Lighting	Other	07/01/2012	18
Burton Electric, Inc. 8805 South 1300 West West Jordan, UT - 84088 Phone: 801-450-1201	Lighting	Contractor	08/23/2006	19
Candle3 LLC 6385 Corporate Dr. Colorado Springs, CO - 80919 Phone: 719-930-9099 Website: www.candle3.com	Controls Lighting	Distributor Manufacturer - Rep	11/21/2014	1

Energy Efficiency Alliance

CAO Group, Inc. 4628 W. Skyhawk Drive West Jordan, UT - 84084 Phone: 801-256-9282 Website: www.caolighting.com	**Specialties** Lighting	**Business Type** Engineering Firm Other: Manufacturer	**Join Date** 11/16/2015	**Projects Completed** 4
CCMS Lighting, Inc. 88 A Elm Street Hopkinton, MA - 01748 Phone: 508-435-5837 Website: ccmslighting.com	**Specialties** Lighting	**Business Type** Other	**Join Date** 05/01/2011	**Projects Completed** 1
Central Electric Supply* 190 North 100 West Richfield, UT - 84701 Phone: 435-896-8486 Website: www.centralelectricsupply.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 01/02/2006	**Projects Completed** 168
Codale Electric Supply, Inc - Casper* 3131 Wood Court Casper, WY - 82601 Phone: 702-261-8900 Website: www.codale.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 06/27/2013	**Projects Completed** 1
Codale Electric Supply, Inc - Cedar City* 477 North 100 West Cedar City, UT - 84720 Phone: 435-586-7681 Website: www.codale.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 04/22/2013	**Projects Completed** 28
Codale Electric Supply, Inc. - Ogden* 3083 S. 2025 W Ogden, UT - 84401 Phone: 801-624-6100 Website: www.codale.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 07/01/2011	**Projects Completed** 103
Codale Electric Supply, Inc.- Salt Lake City* 5225 West 2400 South Salt Lake City, UT - 84120 Phone: 801-975-7300 Website: codale.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 10/02/2002	**Projects Completed** 483
Collings Development llc 150 south 1300 east springville, UT - 84663 Phone: 801-979-9358	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 04/20/2015	**Projects Completed**
Commercial Lighting Supply, Inc.* 2440 South 900 West Salt Lake City, UT - 84115 Phone: 801-262-0888 Website: commerciallightinginc.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 11/02/2002	**Projects Completed** 791
Conserve-A-Watt Lighting* 2327 South Decker Lake Blvd West Valley City, UT - 84119 Phone: 801-975-9363 Website: Cawlighting.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 04/03/2003	**Projects Completed** 170
Consolidated Electrical Distributors - Logan, UT* 636 N. 600 W. Logan, UT - 84321 Phone: 435-752-8905	**Specialties** Farm and Dairy Irrigation Lighting	**Business Type** Distributor	**Join Date** 03/26/2005	**Projects Completed** 71

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Consolidated Electrical Distributors - Vernal* 397 South 1000 East Vernal, UT - 84078 Phone: 435-789-9070	**Specialties** Building envelope Controls Irrigation Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 09/16/2015	**Projects Completed**
Consolidated Electrical Distributors, Inc. - Layton* 606 N Marshall Way Ste B Layton, UT - 84401 Phone: 801-499-0257	**Specialties** Controls Lighting	**Business Type** Distributor	**Join Date** 01/28/2015	**Projects Completed** 11
Consolidated Electrical Distributors, Inc. - Salt Lake City* 1819 S. 900 W. Salt Lake City, UT - 84104 Phone: 801-486-3501	**Specialties** Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 09/25/2012	**Projects Completed** 192
Consolidated Electrical Distributors, Inc. - Sandy* 622 W. 9400 S. Sandy, UT - 84070 Phone: 801-566-4864	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 08/01/2011	**Projects Completed** 5
Cooper Lighting 1121 Highway 74 South Peachtree, GA - 30269 Phone: 770-486-3092 Website: www.cooperlighting.com	**Specialties** Controls Lighting	**Business Type** Manufacturer - Rep	**Join Date** 12/13/2012	**Projects Completed**
Cornerstones Enterprise Services, Corp. P. O. Box 2263 Sandy, UT - 84091 Phone: 801-968-0471 Website: www.cornerstonesservices.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 02/29/2016	**Projects Completed**
CR Lighting & Electric, Inc. 1035 W. Gentile St. Layton, UT - 84041 Phone: 801-544-1533 Website: crlighting.net	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 04/03/2003	**Projects Completed** 33
Crescent Electric Supply Company - Orem 1490 West 105 North Orem, UT - 84057 Phone: 801-224-3355	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 08/15/2013	**Projects Completed**
Crescent Electric Supply Company - Salt Lake City 3140 South 300 West Salt Lake City, UT - 84115 Phone: 801-486-0701 Website: www.cesco.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 10/17/2012	**Projects Completed** 38
Crum Electric Supply - Salt Lake City 1003 West 1060 South Salt Lake City, UT - 84119 Phone: 801-539-7471 Website: crum.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 02/10/2007	**Projects Completed** 4
Custom Lighting Services, LLC 9901 South Prosperity Road West Jordan, UT - 84081 Phone: 801-569-9219 Website: www.blackandmcdonald.com	**Specialties** Controls Lighting	**Business Type** Contractor Engineering Firm	**Join Date** 11/01/2013	**Projects Completed**

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

	Specialties	Business Type	Join Date	Projects Completed
Cutler Electric Inc. 1417 East 150 South Springville, UT - 84663 Phone: 801-489-1351	Lighting Motors and VFDs	Contractor	02/12/2015	
D & A Johnson Electric, Inc. 8 South Angel Street Kaysville, UT - 84037 Phone: 801-593-9559	Appliances Lighting Office Equipment	Contractor	05/14/2015	
Delta T Corporation 2348 Innovation Drive Lexington, KY - 40511 Phone: 877-244-3267 Website: www.bigasssolutions.com	Lighting Other: Other Specialty	Distributor Manufacturer - Rep	11/16/2015	
DesignTek Consulting Group, LLC 1600 W. 2200 S. Salt Lake City, UT - 84119 Phone: 801-255-5449 Website: www.designtekconsulting.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor Engineering Firm	11/11/2013	
DiVi Energy, LLC* 191 North 290 West Lindon, UT - 84042 Phone: 801-243-1811	Lighting	Manufacturer - Rep Other	01/23/2013	98
DMA - Total Lighting Concepts 5263 S. Commerce Dr. Suite 201, Murray, UT - 84107 Phone: 801-268-6300 Website: www.dmatlc.com	Controls Lighting	Manufacturer - Rep	05/30/2005	22
Duncan Electric Supply 580 South 1100 West West Bountiful, UT - 84087 Phone: 501-295-5548	Lighting	Distributor	09/26/2008	19
Eco Safe Lighting 4600 NW Camas Meadows Drive, Suite 210 Camas, WA - 98607 Phone: 360-567-1923 Website: http://www.est-lights.com/about-us/	Lighting	Distributor	02/11/2013	
Electrical Marketing Solutions (DBA) EMS 2139 S West Temple Salt Lake City, UT - 84115 Phone: 801-869-1445 Website: http://emsreps.com/	Controls Lighting	Manufacturer - Rep	12/31/2014	5
Electrical Power & Controls 5203 Holder Dr. WVC, UT - 84120 Phone: 801-971-1913 Website: www.epc120.com	Lighting Motors and VFDs	Contractor	03/28/2014	
Electrical Wholesale Supply - Layton* 600 North 630 West Layton, UT - 84041 Phone: 801-544-1206 Website: www.ewsutah.com	Controls Lighting Motors and VFDs	Distributor	04/25/2013	12

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Electrical Wholesale Supply - Logan, UT* 1651 North 1000 West Logan, UT - 84321 Phone: 435-774-8800 Website: ewsutah.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 03/11/2011	**Projects Completed** 6
Electrical Wholesale Supply - Murray, UT* P.O. Box 57857 Murray, UT - 84157 Phone: 801-268-2555 Website: ewsutah.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 01/20/2007	**Projects Completed** 56
Electro Systems Corp. 559 West 9460 South Sandy, UT - 84070 Phone: 801-562-2231	**Specialties** Controls Lighting	**Business Type** Contractor	**Join Date** 06/23/2014	**Projects Completed**
Elysium Energy LLC 14466 South Long Ridge Drive Herriman , UT - 84096 Phone: 801-440-6821	**Specialties** Lighting Other: Other Specialty	**Business Type** Other	**Join Date** 04/30/2015	**Projects Completed** 17
Encentiv Energy, LLC 1501 Ardmore Blvd. Suite 102, Pittsburgh, PA - 15221 Phone: 412-723-1516 Website: www.encentivenergy.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Other: Energy Efficiency Analytics Other: Energy Efficiency Rebate Processing	**Join Date** 11/11/2015	**Projects Completed** 1
Energy Efficient Lighting 2228 Bryan Circle Salt Lake City, UT - 84108 Phone: 801-913-1965	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 09/16/2013	**Projects Completed** 1
Energy Planning Associates, Inc (DBA) Envirobrite 148 Maritime Dr Sanford, FL - 32771 Phone: 407-302-0001 Website: www.envirobrite.net	**Specialties** Lighting	**Business Type** Manufacturer - Rep	**Join Date** 07/24/2015	**Projects Completed**
Engineering System Solutions DBA ES2 4943 N 29 E Suite A Idaho Falls, ID - 83401 Phone: 208-552-9874 Website: www.es2eng.com	**Specialties** Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 05/08/2014	**Projects Completed**
ESCO 2525 South 300 West South Salt Lake, UT - 84115 Phone: 801-486-8421 Website: escoservice.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 07/04/2004	**Projects Completed** 31
ESP+* 9580 South 500 West Sandy, UT - 84070 Phone: 801-566-0600 Website: espplus.net	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 04/05/2005	**Projects Completed** 585
Evergreen Consulting 2302 West 8540 South West Jordan, UT - 84088 Phone: 801-233-0882	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 03/02/2015	**Projects Completed**

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Express Lighting LLC 7050 South State Street Midvale, UT - 84047 Phone: 801-617-1133 Website: www.express.lighting	**Specialties** Lighting	**Business Type** Distributor Manufacturer - Rep	**Join Date** 12/01/2015	**Projects Completed** 4
Fanlight Corp 2000 S Grove Ave Bldg B Ontario, CA - 91761 Phone: 909-930-6868 Website: plusriteusa.com / mynaturazled.com	**Specialties** Lighting	**Business Type** Manufacturer - Rep	**Join Date** 02/22/2016	**Projects Completed**
Freedom Lighting 4967 Wallace Lane Holladay, UT - 84117 Phone: 801-859-7943	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 05/16/2008	**Projects Completed** 11
GE 664 East 1300 North Pleasant Grove, UT - 84062 Phone: 801-785-8838 Website: www.gelighting.com	**Specialties** Controls Lighting	**Business Type** Manufacturer - Rep	**Join Date** 09/04/2014	**Projects Completed**
Golden Spike Electric 12058 N. Harley Dr. Garland, UT - 84312 Phone: 435-279-4861	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 03/01/2010	**Projects Completed** 3
Grainger Industrial Supply 2775 S. 900 W. Salt Lake City, UT - 84119 Phone: 801-972-1340 Website: grainger.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 07/04/2004	**Projects Completed** 80
Graybar Electric Company - Salt Lake City 2841 So. 900 W. Salt Lake City, UT - 84119 Phone: 801-975-1115 Website: graybar.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 05/30/2005	**Projects Completed** 37
Green Light National, LLC* 1001 South 400 East Orem, UT - 84077 Phone: 801-722-8677 Website: www.greenlightnational.com	**Specialties** Lighting	**Business Type** Contractor Distributor	**Join Date** 02/18/2015	**Projects Completed** 40
Green Planet Company 63 East 11400 South #257 Sandy , UT - 84070 Phone: 801-980-1518 Website: www.greenplanetcompany.com	**Specialties** Appliances HVAC - unitary Lighting Motors and VFDs	**Business Type** Distributor Manufacturer - Rep	**Join Date** 05/07/2014	**Projects Completed** 14
GTC Electric PO Box 731 Park City, UT - 84060 Phone: 435-731-0727	**Specialties** Appliances Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 07/30/2014	**Projects Completed**
Hatch Lighting 4133 N 45 E Idaho Falls, ID - 83401 Phone: 208-200-3000	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 05/06/2014	**Projects Completed** 12
Hedgehog Electric 14553 South 790 West Suite C Bluffdale, UT - 84065 Phone: 801-870-6986 Website: hedgehogelectric.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 09/10/2012	**Projects Completed** 1

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Hidden Peak Electric Company Inc. 1064 South 700 West Salt lake City, UT - 84104 Phone: 801-262-5513 Website: www.hiddenpeakelectric.com	**Specialties** Controls HVAC - unitary Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 02/14/2013	**Projects Completed** 2
Hogan Electric Inc. 4035 South Main Salt Lake City, UT - 84107 Phone: 801-261-8300	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 07/01/2004	**Projects Completed** 17
Holophane 8195 S. Andorra Lane Sandy, UT - 84093 Phone: 801-942-5456 Website: holophane.com	**Specialties** Lighting	**Business Type** Manufacturer - Rep Other	**Join Date** 07/04/2004	**Projects Completed**
Hunt Electric, Inc. 1863 West Alexander Street Salt Lake City, UT - 84119 Phone: 801-975-8844	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 08/05/2005	**Projects Completed** 31
Hussmann Corporation 1385 W 2200 St Salt Lake City, UT - 84119 Phone: 805-458-7615 Website: hussmann.com	**Specialties** Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Manufacturer - Rep	**Join Date** 01/14/2015	**Projects Completed**
IG Group LLC-Dba IG Sign 880 North 100 East Lehi, UT - 84043 Phone: 801-836-7446 Website: www.igsign.com	**Specialties** Lighting Other: Other Specialty	**Business Type** Other	**Join Date** 03/11/2013	**Projects Completed**
Innovative Repairs LLC 524 S. 300 E. Springville, UT - 84663 Phone: 801-489-4460	**Specialties** Controls Farm and Dairy Lighting Motors and VFDs	**Business Type** Manufacturer - Rep	**Join Date** 04/19/2013	**Projects Completed** 9
Intertech Communications Electric, Inc. 756 South Main Suite A Brigham City, UT - 84302 Phone: 435-723-7165	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 01/21/2013	**Projects Completed**
J and J Electric Inc. 3410 S. 1500 W. Ogden, UT - 84401 Phone: 801-622-0270	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 07/01/2011	**Projects Completed** 10
Jacobs Engineering Group, Inc. 3 Tower Bridge 2 Ash Street, Conshohocken, PA - 19428 Phone: 610-238-1000 Website: www.Jacobs.com	**Specialties** Building envelope Compressed Air HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	**Business Type** Engineering Firm	**Join Date** 05/08/2015	**Projects Completed**
Jenson Lighting Maintenance/Refrigeration, Inc. 539 W Billins Rd Salt Lake City, UT - 84115 Phone: 801-262-7800	**Specialties** Lighting	**Business Type** Contractor Manufacturer - Rep	**Join Date** 06/01/2005	**Projects Completed**
Jenson Refrigeration Inc.DBA Jenson Lighting Maintenence 539 W. Bilinis Road Murray, UT - 84157 Phone: 801-262-7800 Website: www.jensonutah.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 04/15/2013	**Projects Completed** 1

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

	Specialties	Business Type	Join Date	Projects Completed
Johnson Powers, LLC 8704 South 120 East Sandy, UT - 84070 Phone: 801-878-7831 Website: www.johnsonpowers.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor	07/23/2014	
Jordan Valley Electric, Inc. 4225 W. Nike Dr. #A West Jordan, UT - 84088 Phone: 801-282-2310	Lighting	Contractor	10/05/2005	2
JRC Inc. 3041 West 2100 South Salt Lake City, UT - 84119 Phone: 801-972-3970 Website: jrclight.com	Controls Lighting	Manufacturer - Rep Other	06/18/2007	14
Ken Garner Engineering, Inc. 420 E. South Temple Suite 370, Salt Lake City, UT - 84111 Phone: 801-328-8800 Website: kengarner.com	Lighting	Engineering Firm	05/11/2011	
Kendrick Electric 1700 E 1700 North Logan, UT - 84341 Phone: 435-752-1888	Lighting	Contractor	11/14/2014	6
Kent Lindquist - Electrical Contractor 1436 Spanish Valley Dr Moab, UT - 84532 Phone: 435-259-5638	Building envelope Lighting	Contractor	11/04/2014	
Larsen Electric, LLC 250 Laurel Lane Chubbuck, ID - 83202 Phone: 208-237-2058 Website: larsenelectric.net	Lighting	Contractor	03/23/2016	
Layton Sales Agency 4404 W. 2100 S. Salt Lake City, UT - 84120 Phone: 801-973-8100 Website: laytonsales.com	Lighting	Manufacturer - Rep	02/10/2007	1
Light Energy Development LLC 41 North Rio Grande Salt Lake City, UT - 84101 Phone: 801-456-3910 Website: www.lightenergydevelopment.net	Lighting	Other	07/23/2013	39
LMS - Lighting Maintenance Service - Utah* 663 West 4330 South Salt Lake City, UT - 84123 Phone: 801-281-0400 Website: lmslighting.com	Controls Lighting Motors and VFDs	Contractor	10/02/2002	542
Loeb Lighting Services 1800 E 5th Ave Columbia, OH - 43219 Phone: 800-866-5616	Controls Lighting	Distributor	03/16/2015	

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

LONG Building Technologies, Inc. P.O. Box 51089 3534 Salt Creek Highway, Casper, WY - 82601 Phone: 307-265-5997 Website: www.long.com	**Specialties** Lighting	**Business Type** Distributor Manufacturer - Rep	**Join Date** 09/27/2012	**Projects Completed** 1
Lux Energy Group 1111 South 120 East Farmington, UT - 84025 Phone: 801-989-8375	**Specialties** Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm Other: Energy Resource Managers	**Join Date** 10/13/2015	**Projects Completed**
Lynn Woodward Electric LLC 3336 So. 1325 W. Ogden, UT - 84401 Phone: 801-621-3220 Website: lwe-llc.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 06/01/2007	**Projects Completed** 23
Marathon Electric LLC 4327 S Main St Murray, UT - 84107 Phone: 801-301-7902	**Specialties** Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 10/01/2008	**Projects Completed** 3
Mark Clary 2302 West 8540 South West Jordan, UT - 84088 Phone: 801-233-0882	**Specialties** Lighting	**Business Type** Architect	**Join Date** 08/08/2013	**Projects Completed**
Meyer Lighting & Supply LLC 1192 Draper Parkway #212 Draper, UT - 84020 Phone: 801-523-3980	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 03/06/2006	**Projects Completed** 72
Midwest Electric, Inc. 40 West Truman Ave. Salt Lake City, UT - 84115 Phone: 801-633-9245 Website: midwest-electric.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 02/01/2005	**Projects Completed** 3
Millcreek Electric Co., Inc. 4042 Buck Hollow Lane Bluffdale, UT - 84065 Phone: 801-263-2300 Website: www.millcreekelectric.com	**Specialties** Appliances Controls Food Service Irrigation Lighting Motors and VFDs Office Equipment	**Business Type** Contractor	**Join Date** 06/16/2014	**Projects Completed** 13
Miter Corp. 6364 Shady Grove Cir. Murray, UT - 84121 Phone: 801-949-6364	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 09/22/2012	**Projects Completed** 20
MKK Consulting Engineers Inc. 4760 S. Highland Drive Suite 106 Salt Lake City, UT - 84115 Phone: 303-796-6000	**Specialties** Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 01/18/2016	**Projects Completed**
Mountain Lighting 390 S Main Street Cedar city, UT - 84720 Phone: 435-586-5502 Website: www.mountainlighting.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 05/09/2013	**Projects Completed** 6

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Neon Lighting and Display Inc - DBA - Neon Lighting & Electric Signs 211 WEST 1000 SOUTH OGDEN , UT - 84404 Phone: 801-393-0415 Website: NEONLIGHTINGUT.COM	**Specialties** Lighting Other: Other Specialty	**Business Type** Manufacturer - Rep Other: SIGN CONTRACTOR	**Join Date** 03/24/2014	**Projects Completed** 4
Optica Energy Management, LLC 1772 Ross Dr Ogden, UT - 84403 Phone: 888-442-4866 Website: www.opticaenergy.com	**Specialties** HVAC - unitary Lighting Motors and VFDs	**Business Type** Distributor Other: Energy Management Company	**Join Date** 04/11/2013	**Projects Completed** 17
Osram Sylvania 2826 Elkhorn Ln Sandy, UT - 84093 Phone: 801-201-8746 Website: mysylvania.com	**Specialties** Lighting	**Business Type** Manufacturer - Rep Other	**Join Date** 06/04/2004	**Projects Completed**
Ovation Engineering & Consulting 1113 N Victoria Way Salt Lake City, UT - 84116 Phone: 801-871-0900	**Specialties** Controls Lighting	**Business Type** Engineering Firm	**Join Date** 12/08/2014	**Projects Completed**
Pacheco Company LLC 3646 E. Summer Hill Salt Lake City, UT - 84121 Phone: 801-541-3375 Website: www.pachecoco.com	**Specialties** Lighting Other: Other Specialty	**Business Type** Contractor Distributor Manufacturer - Rep	**Join Date** 02/12/2015	**Projects Completed**
Perfect Vision Lighting 1489 So. Trapper Ct. Saratoga Springs, UT - 84043 Phone: 801-509-1235	**Specialties** Lighting	**Business Type** Other	**Join Date** 05/30/2005	**Projects Completed** 200
Petroleum Equipment Co 1174 So. 300 W Salt Lake City, UT - 84101 Phone: 801-487-8276 Website: www.petro-equip.net	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 10/03/2013	**Projects Completed** 26
Platt Electric Supply, Inc. - Layton* 730 Marshall Way Layton, UT - 84041 Phone: 801-544-5144	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 10/02/2013	**Projects Completed** 11
Platt Electric Supply, Inc. - Lindon* 7 South 1550 West Lindon, UT - 84042 Phone: 801-785-1677 Website: www.platt.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/16/2007	**Projects Completed** 2
Platt Electric Supply, Inc. - Ogden* 3754 Pacific Avenue Ogden, UT - 84405 Phone: 801-629-0200 Website: platt.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 11/16/2007	**Projects Completed** 14
Platt Electric Supply, Inc. - Salt Lake City* 840 W 2600 S Salt Lake City, UT - 84119 Phone: 801-974-5773 Website: www.platt.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/16/2007	**Projects Completed** 111
Platt Electric Supply, Inc. - Sandy* 8720 S. Sandy Parkway Sandy, UT - 84070 Phone: 801-562-5786 Website: platt.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/16/2007	**Projects Completed** 73

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Platt Electric Supply, Inc. - Tooele* 1183 North 80 East Tooele, UT - 84074 Phone: 435-843-7335 Website: platt.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/16/2007	**Projects Completed** 15
Platt Electric Supply, Inc. - West Valley* 1730 South 4650 West West Valley, UT - 84104 Phone: 801-972-1464 Website: www.platt.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 11/27/2012	**Projects Completed**
Positive Power LLC 4658 W. 1150 S. Ogden, UT - 84404 Phone: 801-732-0680	**Specialties** Lighting	**Business Type** Contractor Distributor	**Join Date** 03/06/2006	**Projects Completed** 25
Professional Electrical Services, Inc. 2443 Progress Dr. Salt Lake City, UT - 84119 Phone: 801-973-8381 Website: proelectric.cc	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 12/10/2014	**Projects Completed**
Progressive Power Solutions, Inc. 1182 N 1565 W Orem, UT - 84057 Phone: 801-602-8369 Website: ppswest.com	**Specialties** Controls Farm and Dairy Irrigation Lighting	**Business Type** Contractor Distributor	**Join Date** 05/12/2009	**Projects Completed** 8
Provident Energy, INC. 2882 N. 1300 E. North Ogden, UT - 84414 Phone: 801-668-7910	**Specialties** Appliances Building envelope HVAC - evaporative HVAC - unitary Lighting	**Business Type** Contractor Other: Energy Rating & Consulting	**Join Date** 02/15/2016	**Projects Completed**
PVE, Inc* 1040 North 2200 West, Suite 100 Salt Lake City, UT - 84107 Phone: 801-359-3158	**Specialties** Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 07/29/2013	**Projects Completed**
Quantum Lighting Group 4074 S. 300 W Salt Lake City, UT - 84107 Phone: 801-270-0010	**Specialties** Lighting	**Business Type** Manufacturer - Rep Other	**Join Date** 05/30/2005	**Projects Completed** 34
RealWinWin, Inc. 1926 Arch Street, 4F Philadelphia, PA - 19103 Phone: 215-732-4480 x 349 Website: www.realwinwin.com	**Specialties** Appliances Building envelope Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	**Business Type** Other: Energy Efficiency Incentive Administration and Consultation	**Join Date** 10/14/2013	**Projects Completed** 43
RME, Inc 8685 W State St Boise, ID - 83714 Phone: 208-853-2968 Website: rmeinc.net	**Specialties** Controls Lighting	**Business Type** Contractor Engineering Firm	**Join Date** 10/14/2014	**Projects Completed**
Robbins Central Electric Co., Inc. 564 Evesham Drive Murray, UT - 84107 Phone: 801-476-5479 Website: www.central-electric.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 02/11/2015	**Projects Completed** 2

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Rocky Mountain Electric - Idaho Falls 6698 N. 25th E Idaho Falls, ID - 83401 Phone: 208-587-9682 x 6	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 08/27/2014	**Projects Completed**
Royal Engineering, Inc. 2335 S. State Street Suite 100, Provo, UT - 84606 Phone: 801-375-2228 Website: www.royaleng.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 12/31/2014	**Projects Completed**
Royal Wholesale Electric - Cedar City* 429 No. 2150 West #2 Cedar City, UT - 84721 Phone: 435-865-6400	**Specialties** Controls Irrigation Lighting	**Business Type** Distributor	**Join Date** 08/09/2013	**Projects Completed** 53
Royal Wholesale Electric - Logan* 917 W 600 N Ste 101 Logan, UT - 84321 Phone: 435-752-7692 Website: royalutah.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 01/09/2008	**Projects Completed** 19
Royal Wholesale Electric - Ogden* 1210 W. 3050 S. Ogden, UT - 84401 Phone: 801-621-6730 Website: royalutah.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 04/28/2007	**Projects Completed** 91
Royal Wholesale Electric - Orem* 21 S 1500 W Orem, UT - 84058 Phone: 801-224-5555 Website: www.royalutah.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 09/22/2012	**Projects Completed** 4
Royal Wholesale Electric - Salt Lake City* 3100 So. 900 W. Salt Lake City, UT - 84119 Phone: 801-973-6000	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 06/09/2007	**Projects Completed** 2
Royal Wholesale Electric - Tooele* 332 So. 1200 W Tooele, UT - 84704 Phone: 435-882-4787	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 06/09/2007	**Projects Completed** 10
Runnin G Electric LLC 4750 South 6700 West Hooper, UT - 84015 Phone: 801-628-6791 Website: N/A	**Specialties** Appliances Building envelope Lighting Office Equipment	**Business Type** Contractor	**Join Date** 01/12/2016	**Projects Completed**
Saddleback Lighting, Inc. 1425 W. Red Ledge Road Suite 101, Washington, UT - 84780 Phone: 435-656-1866 Website: www.SaddlebackLighting.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 05/01/2008	**Projects Completed** 35
Salmon Electrical Contractors 1116 W. 500 S. Suite 1 West Bountiful, UT - 84087 Phone: 801-292-3444	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 04/01/2006	**Projects Completed** 33
Salt Lake Winlectric 6120 South 300 West Murray, UT - 84107 Phone: 801-293-1600 Website: www.slcwinlectric.com	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 09/03/2013	**Projects Completed** 5

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

Schooley Electric Inc. 676 W. 8th Ave Midvale, UT - 84047 Phone: 801-641-3395	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 03/26/2009	**Projects Completed** 18
SES Green Energy 2750 West Rasmussen Rd #101 Park City, UT - 84098 Phone: 435-615-2844 Website: www.sesgreenenergy.com	**Specialties** Lighting Other: Other Specialty	**Business Type** Contractor	**Join Date** 05/10/2016	**Projects Completed**
Siemens Industry, Inc. 9707 S Sandy Parkway Sandy, UT - 84070 Phone: 801-316-2439	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Irrigation Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 01/11/2013	**Projects Completed** 1
Skyline Electric Company 1848 W 2300 S West Valley City, UT - 84119 Phone: 801-972-3656 Website: skyline-electric.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 12/02/2002	**Projects Completed** 23
Smart Building Solutions 2876 South 460 West Salt Lake City, UT - 84115 Phone: 801-733-6000 Website: www.intellivex.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment Other: Other Specialty	**Business Type** Distributor Manufacturer - Rep	**Join Date** 03/04/2015	**Projects Completed**
Spectrum Engineers 324 S. State Street, Suite 400 Salt Lake City, UT - 84111 Phone: 801-328-5151	**Specialties** Lighting	**Business Type** Engineering Firm	**Join Date** 10/14/2013	**Projects Completed**
Star Sign Inc. 1060 East Tabernacle St George, UT - 84770 Phone: 435-628-7806 Website: www.starsignonline.com	**Specialties** Lighting Other: Other Specialty	**Business Type** Contractor	**Join Date** 07/26/2016	**Projects Completed**
Stewart & Co., Inc. 4730 Mile High Dr. Provo, UT - 84604 Phone: 801-787-2363 Website: stewconst.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor Distributor	**Join Date** 08/26/2014	**Projects Completed**
SugarHouse Electric, L.L.C. 2223 South Highland Dr. #E6-132 Salt Lake city, UT - 84106 Phone: 801-633-7722	**Specialties** Building envelope Irrigation Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 12/12/2015	**Projects Completed**
SuperGreen Solutions 2682 S. Highland Dr. Ste 103 SALT LAKE CITY, UT - 84106 Phone: 801-953-1096 Website: www.supergreensolutions.com	**Specialties** Controls Lighting	**Business Type** Distributor	**Join Date** 08/26/2015	**Projects Completed** 20
Taylor Electric, Inc. 1018 W Beardsley Pl. Salt Lake City, UT - 84119 Phone: 801-413-1376	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 04/28/2007	**Projects Completed** 16

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

TEC Electric 755 West 200 South Logan, UT - 84321 Phone: 435-753-0920 Website: www.tec-electric.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 05/11/2011	**Projects Completed** 10
Thomson Electric Sales Inc. 127 S. Main Street Logan, UT - 84321 Phone: 435-752-2252	**Specialties** Lighting	**Business Type** Distributor Engineering Firm	**Join Date** 10/22/2007	**Projects Completed** 32
Titan LED - Green Funds of Utah - Delta 123 East 100 North Delta, UT - 84624 Phone: 435-406-1775 Website: www.TitanLED.net	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 07/01/2011	**Projects Completed** 8
Titan LED - North Logan 641 E 2200 N North Logan, UT - 84341 Phone: 801-784-8260 Website: www.titanled.net	**Specialties** Lighting	**Business Type** Manufacturer - Rep	**Join Date** 07/08/2014	**Projects Completed** 5
Utah LED Lighting 4077 Rons Ct Riverton, UT - 84096 Phone: 801-860-9984	**Specialties** Lighting	**Business Type** Other	**Join Date** 03/28/2013	**Projects Completed** 19
Utah Yamas Controls Inc.* 13526 S. 110 W. Draper, UT - 84020 Phone: 801-990-1950 Website: www.utahyamas.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	**Business Type** Contractor Distributor Engineering Firm Manufacturer - Rep	**Join Date** 01/21/2013	**Projects Completed** 1
Utility Cost Management Consultants 102 E. Cobble Creek Drive Cedar City, UT - 84721 Phone: 435-807-1882 Website: www.ucmc-USA.com	**Specialties** Lighting	**Business Type** Other: consultant	**Join Date** 10/23/2015	**Projects Completed** 9
Vibrant 619 S Bluff St #401 St George, UT - 84770 Phone: 702-701-2450 Website: vibrantenergygroup.com	**Specialties** Lighting	**Business Type** Distributor Manufacturer - Rep Other: consulting, sales	**Join Date** 01/15/2015	**Projects Completed**
Voss Electric Co. 6547 S Racine Circle, Suite 100 Centennial , CO - 80111 Phone: 303-243-5503 Website: vosslighting.com	**Specialties** Controls Lighting	**Business Type** Distributor	**Join Date** 09/09/2016	**Projects Completed**
Wasatch Electric 2455 West 1500 South Suite A Salt Lake City, UT - 84104 Phone: 801-487-4511 Website: wasatchelectric.com	**Specialties** Lighting	**Business Type** Contractor	**Join Date** 02/01/2010	**Projects Completed** 3
WESCO Distribution - Salt Lake City 3210 South 900 West Salt Lake City, UT - 84119 Phone: 801-975-0600 Website: wesco.com	**Specialties** Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 03/04/2004	**Projects Completed** 13
Western Land Management LLC 2815 East Linwood Lane Manila, UT - 84046 Phone: 949-285-9454	**Specialties** Food Service Lighting	**Business Type** Distributor	**Join Date** 01/29/2016	**Projects Completed**

Energy Efficiency Alliance

Whitehead Wholesale Electric, Inc. 247 34th St. Ogden, UT - 84402 Phone: 801-394-1657	**Specialties** Lighting	**Business Type** Distributor	**Join Date** 04/15/2006	**Projects Completed** 123
Wyer Electric, LLC 5263 Commerce Dr Murray, UT - 84107 Phone: 801-262-5673	**Specialties** Building envelope Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 09/05/2014	**Projects Completed**
YESCO -Young Electric Sign Company - Logan, UT* 1651 North 1000 West Logan, UT - 84321 Phone: 435-774-8800 Website: yesco.com	**Specialties** Lighting	**Business Type** Contractor Distributor	**Join Date** 04/07/2007	**Projects Completed** 24
YESCO LLC - Young Electric Sign Co. - Salt Lake City, UT* 1605 S. Gramercy Road Salt Lake City, UT - 84104 Phone: 801-464-6413 Website: www.yesco.com	**Specialties** Appliances Controls Lighting Motors and VFDs	**Business Type** Contractor Manufacturer - Rep	**Join Date** 09/22/2012	**Projects Completed** 70
Zeus Electric, LLC 5526 W 13400 S #314 Herriman, UT - 84096 Phone: 801-541-8468	**Specialties** Building envelope Lighting	**Business Type** Contractor	**Join Date** 01/15/2016	**Projects Completed** 2

Energy Efficiency Alliance

The following is a list of contractors, distributors and other businesses participating in Rocky Mountain Power's Energy Efficiency Alliance 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.

An asterisk (*) indicates Rocky Mountain Power Outstanding Contribution Award winning trade allies in 2013, 2014 and/or 2015.

Search Criteria:

Selected State(s):	Utah
Specialties:	Motors and VFDs
Business Type:	--ANY--

Search Results: 91 - Date and Time: 03/30/2017 02:50:27 PM

	Specialties	Business Type	Join Date	Projects Completed
Ace Electrical, Inc 3575 South West Temple Suite 7, Salt L:ake City, UT - 84115 Phone: 801-266-3848 Website: www.ace-electrical.com	Controls Motors and VFDs	Contractor	02/11/2013	
Acx Service 563 Ogden Canyon Ogden, UT - 84401 Phone: 385-325-2295 Website: acxservice.com	Appliances Building envelope Compressed Air Controls Farm and Dairy Food Service HVAC - evaporative HVAC - unitary Irrigation Motors and VFDs Office Equipment Other: Other Specialty	Contractor Other: Energy Audits & Commissioning	04/14/2015	
All Electric Plus, Inc. 182 S. 200 West Paragonah, UT - 94160 Phone: 435-477-9591 Website: www.allelectricplus.com	Controls Farm and Dairy Irrigation Lighting Motors and VFDs	Distributor	11/03/2014	2
American Electric Company, Inc. 78 West 13775 South, Suite 9 Draper, UT - 84020 Phone: 801-254-0782 Website: www.americanelectric.cc	Appliances Building envelope Controls Lighting Motors and VFDs Other: Other Specialty	Contractor	04/06/2015	
American Mechanical Systems Service, LLC 7530 South State Street Midvale, UT - 84047 Phone: 801-428-0400 Website: www.ams-ut.com	Controls HVAC - unitary Motors and VFDs	Contractor	11/30/2012	
Applied Product Solutions 2822 South 1030 West Salt Lake City, UT - 84119 Phone: 801-441-4949 Website: www.aps.hvacinfo.com	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Manufacturer - Rep	11/17/2015	
Architectural Nexus, Inc. 2505 East Parleys Way Salt Lake City, UT - 84109 Phone: 801-924-5000 Website: www.archnexus.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	Architect	08/18/2014	

Energy Efficiency Alliance

Aspen Engineering and Environmental LLC 140 Aspen Circle Park City, UT - 84098 Phone: 435-565-1535 Website: www.a2e-llc.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 03/18/2013	**Projects Completed**
Black Diamond Electric 170 S. Mountain Way Dr. Orem, UT - 84058 Phone: 801-473-1203 Website: blackdiamondelectriclc.com	**Specialties** Motors and VFDs	**Business Type** Contractor	**Join Date** 05/11/2011	**Projects Completed** 5
Case, Lowe & Hart, Inc. 2484 Washington Blvd. Suite 510, Ogden, UT - 84401 Phone: 801-399-5821 Website: www.clhae.com	**Specialties** Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Architect Engineering Firm	**Join Date** 05/17/2013	**Projects Completed**
Cedar Valley Heating & Air Conditioning, Inc. 1400 N. Main, Bldg A Cedar City, UT - 84721 Phone: 435-586-8788 Website: cedarvalleyheatingandair.com	**Specialties** HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 05/18/2016	**Projects Completed**
Codale Electric Supply, Inc.- Salt Lake City* 5225 West 2400 South Salt Lake City, UT - 84120 Phone: 801-975-7300 Website: codale.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 10/02/2002	**Projects Completed** 483
Collings Development llc 150 south 1300 east springville, UT - 84663 Phone: 801-979-9358	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 04/20/2015	**Projects Completed**
Comfort Systems USA Intermountain 2035 Milestone Dr. Suite A Salt Lake City, UT - 84104 Phone: 801-907-6700 Website: comfortsystemsutah.com	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 06/30/2014	**Projects Completed**
Commercial Mechanical Systems & Service 3395 West 1820 South Salt Lake City, UT - 84104 Phone: 801-977-3925 Website: cmsutah.com	**Specialties** HVAC - unitary Motors and VFDs Other: Other Specialty	**Business Type** Contractor	**Join Date** 02/01/2012	**Projects Completed**
Compressor-Pump & Service, Inc. 3333 W 2400 S Salt Lake City, UT - 84119 Phone: 801-973-0154 Website: compressor-pump.com	**Specialties** Motors and VFDs	**Business Type** Distributor Manufacturer - Rep	**Join Date** 09/01/2005	**Projects Completed**
Consolidated Electrical Distributors - Vernal* 397 South 1000 East Vernal, UT - 84078 Phone: 435-789-9070	**Specialties** Building envelope Controls Irrigation Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 09/16/2015	**Projects Completed**
Consolidated Electrical Distributors, Inc. - Salt Lake City* 1819 S. 900 W. Salt Lake City, UT - 84104 Phone: 801-486-3501	**Specialties** Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 09/25/2012	**Projects Completed** 192

Energy Efficiency Alliance

ROCKY MOUNTAIN POWER

	Specialties	Business Type	Join Date	Projects Completed
Cornerstones Enterprise Services, Corp. P. O. Box 2263 Sandy, UT - 84091 Phone: 801-968-0471 Website: www.cornerstonesservices.com	Controls Lighting Motors and VFDs	Contractor	02/29/2016	
Cutler Electric Inc. 1417 East 150 South Springville, UT - 84663 Phone: 801-489-1351	Lighting Motors and VFDs	Contractor	02/12/2015	
Dairy Systems Company 4004 N Highway 91 Hyde Park, UT - 84318 Phone: 435-563-6660	Controls Farm and Dairy Irrigation Motors and VFDs	Contractor Distributor Other: Retailer	05/13/2013	
DesignTek Consulting Group, LLC 1600 W. 2200 S. Salt Lake City, UT - 84119 Phone: 801-255-5449 Website: www.designtekconsulting.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor Engineering Firm	11/11/2013	
Dixon Electric Inc. 1273 South River View Dr. Spanish Fork, UT - 84660 Phone: 801-310-4928	Motors and VFDs	Contractor	04/07/2014	
Electrical Power & Controls 5203 Holder Dr. WVC, UT - 84120 Phone: 801-971-1913 Website: www.epc120.com	Lighting Motors and VFDs	Contractor	03/28/2014	
Electrical Wholesale Supply - Layton* 600 North 630 West Layton, UT - 84041 Phone: 801-544-1206 Website: www.ewsutah.com	Controls Lighting Motors and VFDs	Distributor	04/25/2013	12
EME, Inc 2496 S West Temple Salt Lake City , UT - 84115 Phone: 801-746-2828 Website: www.EMEUtah.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	06/06/2016	
Encentiv Energy, LLC 1501 Ardmore Blvd. Suite 102, Pittsburgh, PA - 15221 Phone: 412-723-1516 Website: www.encentivenergy.com	Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Other: Energy Efficiency Analytics Other: Energy Efficiency Rebate Processing	11/11/2015	1
Energy Management Corporation* 501 West 700 South Salt Lake City, UT - 84101 Phone: 801-366-4100 Website: emcsolutions.com	HVAC - unitary Motors and VFDs	Distributor	05/01/2004	
Engineered Systems Assoc., Inc. 1355 E. Center Street Pocatello, ID - 83201 Phone: 208-233-0501	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Engineering Firm	01/10/2014	

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	Specialties	Business Type	Join Date	Projects Completed
Engineering System Solutions DBA ES2 4943 N 29 E Suite A Idaho Falls, ID - 83401 Phone: 208-552-9874 Website: www.es2eng.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Engineering Firm	05/08/2014	
Green Planet Company 63 East 11400 South #257 Sandy , UT - 84070 Phone: 801-980-1518 Website: www.greenplanetcompany.com	Appliances HVAC - unitary Lighting Motors and VFDs	Distributor Manufacturer - Rep	05/07/2014	14
GTC Electric PO Box 731 Park City, UT - 84060 Phone: 435-731-0727	Appliances Lighting Motors and VFDs	Contractor	07/30/2014	
Gustave A. Larson Company 210 W. Crosswood Square Salt Lake City, UT - 84115 Phone: 801-487-0644 Website: galarson.com	HVAC - unitary Motors and VFDs	Distributor	02/01/2007	
Hawk Electric, Inc. P.O. Box 540150 North Salt Lake, UT - 84054 Phone: 801-397-1020	Motors and VFDs	Contractor	05/01/2005	9
Hidden Peak Electric Company Inc. 1064 South 700 West Salt lake City, UT - 84104 Phone: 801-262-5513 Website: www.hiddenpeakelectric.com	Controls HVAC - unitary Lighting Motors and VFDs	Contractor	02/14/2013	2
Honeywell International 2371 S. Presidents Way Suite A Salt Lake City, UT - 84120 Phone: 801-978-7136 Website: honeywell.com	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor Distributor Manufacturer - Rep	05/01/2006	
Hussmann Corporation 1385 W 2200 St Salt Lake City, UT - 84119 Phone: 805-458-7615 Website: hussmann.com	Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Manufacturer - Rep	01/14/2015	
Innovative Repairs LLC 524 S. 300 E. Springville, UT - 84663 Phone: 801-489-4460	Controls Farm and Dairy Lighting Motors and VFDs	Manufacturer - Rep	04/19/2013	9
Jacobs Engineering Group, Inc. 3 Tower Bridge 2 Ash Street, Conshohocken, PA - 19428 Phone: 610-238-1000 Website: www.Jacobs.com	Building envelope Compressed Air HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	Engineering Firm	05/08/2015	
Johnson Controls, Inc. 2255 Technology Parkway West Valley City, UT - 84119 Phone: 801-903-7532	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor Manufacturer - Rep	06/01/2007	

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	Specialties	Business Type	Join Date	Projects Completed
Johnson Powers, LLC 8704 South 120 East Sandy, UT - 84070 Phone: 801-878-7831 Website: www.johnsonpowers.com	Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Contractor	07/23/2014	
KEE Engineering and Consulting LLC 695 W. 1980 So Price, UT - 84501 Phone: 435-613-1220 Website: www.keeengineering.com	Controls Motors and VFDs	Engineering Firm	03/14/2016	
KHI Mechanical 2630 S 3270 W Ste B Salt Lake City, UT - 84119 Phone: 801-972-2680	HVAC - unitary Motors and VFDs	Contractor	01/01/2009	
LMS - Lighting Maintenance Service - Utah* 663 West 4330 South Salt Lake City, UT - 84123 Phone: 801-281-0400 Website: lmslighting.com	Controls Lighting Motors and VFDs	Contractor	10/02/2002	542
Lux Energy Group 1111 South 120 East Farmington, UT - 84025 Phone: 801-989-8375	Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Engineering Firm Other: Energy Resource Managers	10/13/2015	
Marathon Electric LLC 4327 S Main St Murray, UT - 84107 Phone: 801-301-7902	Lighting Motors and VFDs	Contractor	10/01/2008	3
McKinstry Essention, LLC 112 N. Rubey Dr. Suite 200, Golden, CO - 80403 Phone: 435-632-8433 Website: www.mckinstry.com	Building envelope Compressed Air Controls HVAC - evaporative HVAC - unitary Irrigation Motors and VFDs Other: Other Specialty	Engineering Firm	02/12/2014	
Mechanical Service & Systems, Inc. 1055 South 700 West Salt Lake City, UT - 84104 Phone: 801-255-9333 x 1 Website: www.mss84.com	HVAC - unitary Motors and VFDs	Contractor	08/01/2006	2
Millcreek Electric Co., Inc. 4042 Buck Hollow Lane Bluffdale, UT - 84065 Phone: 801-263-2300 Website: www.millcreekelectric.com	Appliances Controls Food Service Irrigation Lighting Motors and VFDs Office Equipment	Contractor	06/16/2014	13
MKK Consulting Engineers Inc. 4760 S. Highland Drive Suite 106 Salt Lake City, UT - 84115 Phone: 303-796-6000	Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Engineering Firm	01/18/2016	

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ROCKY MOUNTAIN POWER

	Specialties	Business Type	Join Date	Projects Completed
Modern Mechanical LLC 1501 West 2650 South Ste 103 Ogden, UT - 84401 Phone: 801-731-0337 Website: www.modernmechanicalutah.com	Appliances Compressed Air Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	08/14/2014	
Mountain Valley Pump Service 1444 N 300 W Logan, UT - 84341 Phone: 435-753-0916	Motors and VFDs	Distributor	08/01/2004	
Musgrove Engineering, PA 234 Whisperwood Way ` , Boise, ID - 83709 Phone: 208-384-0585 Website: musgrovepa.com	Compressed Air Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs Office Equipment	Engineering Firm	07/28/2015	
Nelson's Heating & Refrigeration 1070 Bowling Alley Ln. Moab, UT - 84532 Phone: 435-259-5625	HVAC - unitary Motors and VFDs	Contractor	12/01/2005	
Optica Energy Management, LLC 1772 Ross Dr Ogden, UT - 84403 Phone: 888-442-4866 Website: www.opticaenergy.com	HVAC - unitary Lighting Motors and VFDs	Distributor Other: Energy Management Company	04/11/2013	17
Platt Electric Supply, Inc. - Layton* 730 Marshall Way Layton, UT - 84041 Phone: 801-544-5144	Controls Lighting Motors and VFDs	Distributor	10/02/2013	11
Platt Electric Supply, Inc. - Lindon* 7 South 1550 West Lindon, UT - 84042 Phone: 801-785-1677 Website: www.platt.com	Controls Lighting Motors and VFDs	Distributor	11/16/2007	2
Platt Electric Supply, Inc. - Salt Lake City* 840 W 2600 S Salt Lake City, UT - 84119 Phone: 801-974-5773 Website: www.platt.com	Controls Lighting Motors and VFDs	Distributor	11/16/2007	111
Platt Electric Supply, Inc. - Sandy* 8720 S. Sandy Parkway Sandy, UT - 84070 Phone: 801-562-5786 Website: platt.com	Controls Lighting Motors and VFDs	Distributor	11/16/2007	73
Platt Electric Supply, Inc. - Tooele* 1183 North 80 East Tooele, UT - 84074 Phone: 435-843-7335 Website: platt.com	Controls Lighting Motors and VFDs	Distributor	11/16/2007	15
Platt Electric Supply, Inc. - West Valley* 1730 South 4650 West West Valley, UT - 84104 Phone: 801-972-1464 Website: www.platt.com	Controls Lighting Motors and VFDs	Distributor	11/27/2012	

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Precision Air Management, LLC 1388 South 350 West Lehi, UT - 84043 Phone: 801-360-1848 Website: precisionairmgmt.com	**Specialties** Controls HVAC - unitary Motors and VFDs Office Equipment	**Business Type** Contractor	**Join Date** 11/24/2015	**Projects Completed**
Prettyman Electric 5901 S. Jonquil Drive 5901 S. Jonquil Drive, Taylorsville, UT - 84129 Phone: 801-243-4055	**Specialties** Appliances Building envelope Compressed Air Controls Food Service HVAC - unitary Irrigation Motors and VFDs	**Business Type** Contractor Other: Design Build, Repair, Service, Maintenance	**Join Date** 12/05/2013	**Projects Completed**
PVE, Inc* 1040 North 2200 West, Suite 100 Salt Lake City, UT - 84107 Phone: 801-359-3158	**Specialties** Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 07/29/2013	**Projects Completed**
RealWinWin, Inc. 1926 Arch Street, 4F Philadelphia, PA - 19103 Phone: 215-732-4480 x 349 Website: www.realwinwin.com	**Specialties** Appliances Building envelope Controls Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment	**Business Type** Other: Energy Efficiency Incentive Administration and Consultation	**Join Date** 10/14/2013	**Projects Completed** 43
Redd Mechanical Incorporated 1012 SOUTH 300 WEST BLANDING, UT - 84511 Phone: 435-678-2500 x 2500 Website: www.reddmechanical.com	**Specialties** Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 07/02/2015	**Projects Completed**
Riverside Plumbing & Htg, Inc. 366 N 500 W Moab, UT - 84532 Phone: 435-259-8324	**Specialties** HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 11/01/2005	**Projects Completed**
Robbins Central Electric Co., Inc. 564 Evesham Drive Murray, UT - 84107 Phone: 801-476-5479 Website: www.central-electric.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 02/11/2015	**Projects Completed** 2
Rocky Mountain Mechanical 3412 S. West Temple Salt Lake City, UT - 84115 Phone: 801-997-0585 Website: www.automatedutah.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Contractor	**Join Date** 03/08/2016	**Projects Completed**
Royal Engineering, Inc. 2335 S. State Street Suite 100, Provo, UT - 84606 Phone: 801-375-2228 Website: www.royaleng.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 12/31/2014	**Projects Completed**
Saddleback Lighting, Inc. 1425 W. Red Ledge Road Suite 101, Washington, UT - 84780 Phone: 435-656-1866 Website: www.SaddlebackLighting.com	**Specialties** Controls Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 05/01/2008	**Projects Completed** 35

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	Specialties	Business Type	Join Date	Projects Completed
Sammy's Heating and Air 935 E. 1150 N. Bountiful, UT - 84010 Phone: 801-698-0096 Website: sammyshvac.com	HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	11/02/2015	
Siemens Industry, Inc. 9707 S Sandy Parkway Sandy, UT - 84070 Phone: 801-316-2439	Building envelope Controls HVAC - evaporative HVAC - unitary Irrigation Lighting Motors and VFDs	Contractor	01/11/2013	1
Smart Building Solutions 2876 South 460 West Salt Lake City, UT - 84115 Phone: 801-733-6000 Website: www.intellivex.com	Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Office Equipment Other: Other Specialty	Distributor Manufacturer - Rep	03/04/2015	
St. George Winlectric 298 North Industrial Road St. George, UT - 84770 Phone: 435-628-1680	Controls Farm and Dairy Motors and VFDs	Distributor	12/10/2013	
Stewart & Co., Inc. 4730 Mile High Dr. Provo, UT - 84604 Phone: 801-787-2363 Website: stewconst.com	Controls Lighting Motors and VFDs	Contractor Distributor	08/26/2014	
SugarHouse Electric, L.L.C. 2223 South Highland Dr. #E6-132 Salt Lake city, UT - 84106 Phone: 801-633-7722	Building envelope Irrigation Lighting Motors and VFDs	Contractor	12/12/2015	
SUMMA Energy Services 250 N 200 W Hyrum, UT - 84319 Phone: 435-245-6120 Website: summaenergy.com	HVAC - unitary Motors and VFDs Other: Other Specialty	Other	01/01/2009	
TEC Electric 755 West 200 South Logan, UT - 84321 Phone: 435-753-0920 Website: www.tec-electric.com	Controls Lighting Motors and VFDs	Contractor	05/11/2011	10
Trane* 2817 S. 1030 W. Salt Lake City, UT - 84119 Phone: 801-486-0500 Website: www.trane.com	Controls HVAC - unitary Motors and VFDs	Distributor Manufacturer - Rep	03/01/2005	
United Team Mechanical 151 N 600 W Kaysville, UT - 84037 Phone: 801-991-1145	HVAC - unitary Motors and VFDs	Contractor	09/01/2005	
Utah Engineering 145 W. 2950 S. Salt Lake City, UT - 84115 Phone: 801-466-3583 Website: samedayutah.com	Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs	Contractor	12/24/2013	

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Utah Yamas Controls Inc.* 13526 S. 110 W. Draper, UT - 84020 Phone: 801-990-1950 Website: www.utahyamas.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	**Business Type** Contractor Distributor Engineering Firm Manufacturer - Rep	**Join Date** 01/21/2013	**Projects Completed** 1
Valley Implement 213 West 8th North Preston, ID - 83263 Phone: 208-852-0430 Website: valley-implement.com	**Specialties** Controls Irrigation Motors and VFDs	**Business Type** Contractor	**Join Date** 12/05/2012	**Projects Completed** null
Valley Implement 2570 N Main Logan, UT - 84341 Phone: 435-787-1586 Website: valley-implement.com	**Specialties** Controls Farm and Dairy Irrigation Motors and VFDs	**Business Type** Contractor	**Join Date** 12/05/2012	**Projects Completed** null
Van Boerum & Frank Associates 330 South 300 East Salt Lake City, UT - 84111 Phone: 801-530-3148 Website: www.vbfa.com	**Specialties** Building envelope Controls HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Architect Engineering Firm Other	**Join Date** 01/01/2012	**Projects Completed**
WESCO Distribution - Salt Lake City 3210 South 900 West Salt Lake City, UT - 84119 Phone: 801-975-0600 Website: wesco.com	**Specialties** Lighting Motors and VFDs	**Business Type** Distributor	**Join Date** 03/04/2004	**Projects Completed** 13
WHW Engineering Inc. 8619 Sandy Parkway #101 Sandy, UT - 84070 Phone: 801-466-4021	**Specialties** HVAC - evaporative HVAC - unitary Motors and VFDs	**Business Type** Engineering Firm	**Join Date** 02/23/2015	**Projects Completed**
Wilson Mohr 3186 S. Washington St. Salt Lake City, UT - 84115 Phone: 801-214-3300 Website: wilsonmohr.com	**Specialties** Motors and VFDs	**Business Type** Contractor	**Join Date** 10/01/2011	**Projects Completed**
Wyer Electric, LLC 5263 Commerce Dr Murray, UT - 84107 Phone: 801-262-5673	**Specialties** Building envelope Controls Lighting Motors and VFDs	**Business Type** Contractor	**Join Date** 09/05/2014	**Projects Completed**
YESCO LLC - Young Electric Sign Co. - Salt Lake City, UT* 1605 S. Gramercy Road Salt Lake City, UT - 84104 Phone: 801-464-6413 Website: www.yesco.com	**Specialties** Appliances Controls Lighting Motors and VFDs	**Business Type** Contractor Manufacturer - Rep	**Join Date** 09/22/2012	**Projects Completed** 70

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Appendix 6
Utah Program Evaluation Recommendations and Responses

Utah 2016 Program Evaluations

Program Evaluation Recommendations and Company Responses

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

The table below lists the programs, the program years that were evaluated during 2016 and the third party evaluator who completed the evaluation. Program evaluations are available for review at www.pacificorp.com/es/dsm/utah.html

Table 1 – Program Evaluations

Program	Program Years Evaluated	Evaluator	Progress Status
Home Energy Savings	2013 – 2014	Cadmus	Completed
Home Energy Reports	8/1/2012 - 1/31/2014	Navigant	Completed
New Homes	2013 - 2014	Cadmus	Completed
Refrigerator Recycling*	2013 - 2014	Cadmus	Completed
Strategic Energy Management	2014 - 2015	Cadmus	Completed
*watt*smart Business	2014 - 2015	Cadmus	Completed in 2017
Home Energy Savings	2015 - 2016	Cadmus	In Progress
Low Income Weatherization	2013 - 2015	Opinion Dynamics	In Progress

In each report published, Table 2 summarizes the third party evaluator's recommendations and the Company's response. *Refrigerator Recycling recommendations are not provided due to cancellation of the program.

Table 2 – Home Energy Savings Evaluation Recommendations

Home Energy Savings Evaluation Recommendations	Rocky Mountain Power Action Plan
Assign measure categories by end use (instead of delivery channel) to ensure the most appropriate cost-effectiveness results instead of delivery channel.	The Company implemented the Technical Resource Library (TRL) in 2015, which includes measure categorization. The program administrator now follows the same categorization.
For the upstream lighting database, track all data in a consistent manner across each program evaluation period (i.e. 2015-2016, 2016-2017 etc.). It was difficult for the evaluator to map the program administrator's database to the price database.	The program administrator will standardize upstream lighting database tracking to ensure that all data provided is consistent and accurate.
Consider accounting for commercial installation of upstream bulbs in the reported savings. Currently, the	The program evaluation covered a period before the Company began offering instant incentives for LED

Home Energy Savings Evaluation Recommendations	Rocky Mountain Power Action Plan
Company does not account for cross-sector sales from the upstream lighting incentives.	lighting to non-residential customers. Given the changing nature of the lighting market and the new offering for non-residential customers, the Company does not plan to adjust savings for cross-sector sales at this time, but will continue to monitor this trend in future evaluations.
Consider using nonparticipant spillover analysis in the NTG estimation for all programs. Nonparticipant spillover results in energy savings caused by, but not rebated through, a utility's demand-side management activities. Through responses to the general population survey, Cadmus estimated nonparticipant spillover as 1% of HES program savings. These savings were not included because this estimation is relatively new in the industry.	The Company will incorporate nonparticipant spillover in the NTG estimation in the next round of evaluations.
Rocky Mountain Power should continue using the Retail Sales Allocation Tool ("RSAT") to determine which stores in their territory should be included as participating stores in the program.	The program administrator will continue using the RSAT.
Consider additional studies to quantify spillover and market transformation for use in lighting NTG calculations. This evaluation examined a portion of participant spillover found from the upstream lighting store intercept leakage survey, however, it was not an exhaustive view of spillover since the sample was designed to capture leakage and not spillover.	The Company will consider this recommendation in its next evaluation cycle.
Continue to pursue a multi-touch marketing strategy, using a mix of bill inserts and retailer/contractor training. Given the large percentage of customers who learned of wattsmart offerings through bill inserts, examine the proportion of customers selecting to receive online bills and ensure these online channels proportionately advertise the programs with the messages that motivated customers to participate: long-lasting products, saving energy, replacing equipment and reducing costs.	The Company will continue to pursue a multi-touch marketing strategy.
Continue to review methods for simplifying the applications, particularly for duct sealing and insulation applications which have been prone to greater errors. Implement additional training for HVAC and weatherization contractors to help mitigate this issue by covering the data points required for a complete application and how to best support a customer who chooses to fill out the application, and explore making duct sealing and insulation an online application to reduce errors.	The program continues to simplify the application process. Online applications are available for duct sealing and insulation applications. The program will include online application training in future enrollment of trade allies.
Continue regular trainings with trade allies (e.g., distributors, retailers, sales associates, contractors), updating them on tariff changes and, where appropriate, supporting them with sales and marketing	Program will continue to send quarterly trade ally newsletters, provide roundtable events bi-annually, and identify areas for additional training where feasible and cost-effective.

Home Energy Savings Evaluation Recommendations	Rocky Mountain Power Action Plan
training. Analyze success of efforts to register non-registered contractors who worked with rebate participants within 90 days to determine whether the additional outreach mitigated the number of rejected applications due to non-qualified contractors.	

Table 3 – Home Energy Reports Evaluation Recommendations

Home Energy Reports Evaluation Recommendations	Rocky Mountain Power Action Plan
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 (randomized control trial).	The Company has already refilled the customer base of the next highest usage customers not already in the program. First report went out August 2016.

Table 4 – New Homes Evaluation Recommendations

New Homes Evaluation Recommendations	Rocky Mountain Power Action Plan
Due to Utah's new residential energy code (went into effect July 1, 2014), the baseline for typical, non-Energy Star new homes will become more efficient. The Company should evaluate the impact of this code change on the baseline of the new construction program.	New construction measures were redesigned in 2016 and the current code is taken into consideration for baseline calculations.
Due to homebuyers not inquiring about energy efficient homes, the Company should consider a campaign to increase awareness of the benefits of energy efficient homes. This may include engaging real estate professionals via realtor and appraiser trainings and incorporating energy efficiency designations and ratings into multiple listing services.	The new program administrator will explore new marketing tactics.
Many inactive builders believed that participation in the program was not worth the effort. Explore methods of encouraging inactive and nonparticipant builders to attend workshops.	The new program administrator will explore new marketing and outreach tactics.
Because of the limited scope of a traditional NTG analysis, the program may not be fully quantifying the long term impact in which the program has influenced building practices in the state of Utah. Conduct a market effects analysis for added savings.	The Company will consider this option. However, the Company will scrutinize the appropriateness and cost of the analysis considering the New Homes program was condensed into the Home Energy Savings program.

Table 5 – Strategic Energy Management Evaluation Recommendations

Strategic Energy Management Evaluation Recommendations	Rocky Mountain Power Action Plan
Due to the challenges and learning curves of new program implementation, RMP may wish to review other Strategic Energy Management ("SEM") programs or offerings.	RMP is actively participating in industry workgroups facilitated by Consortium for Energy Efficiency and Northwest Energy Efficiency Alliance to stay abreast of industry best practices on strategic energy management. RMP also meets regularly with SEM implementation firms from around the country to learn of new practices and evaluate current program administration.
Finding the "right" customer to engage with SEM can be challenging. Continue further refinement of the customer vetting process and seek input from the Energy Management Provider ("EMP") and participants.	RMP has continued to refine its customer vetting process over the last 24 months to target customers who have high energy intensity, as well as organizational structures enabling them to succeed in a strategic energy management engagement. RMP has also development tools to aid in the identification of prime customers, such as a one page scoping document designed to measure customer readiness and energy savings potential.
To reduce future customer confusion and increase customer buy-in, engage potential senior-level executives during recruitment and describe how it fits with the customer's current involvement with other RMP offerings. Set clear expectations for staff involvement and time commitments.	RMP began this process prior to the publication of this recommendation. All SEM candidates are engaged in kickoff meetings where executives must be present, and must sign a letter of intent fully demonstrating their knowledge of the staff and time commitments the engagement will necessitate. Through this process executive buy in is garnered upfront and employees are empowered to make the necessary changes within their organizations to facilitate energy savings.
Provide clear protocols and project priorities to EMPs, specifically all communication and data request protocols. Provide EMPs with clear priorities for each project.	RMP began this process prior to the publication of this recommendation. Protocols for obtaining customer data have been long established through dedicated email addresses and RMP staff members. Project priorities, milestones, and reporting expectations are established at the outset of each engagement.

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Appendix 7
Utah DSM Outreach and Communications Year 7 Report

January – December 2016

TABLE OF CONTENTS

Exhibits

Preface

On June 11, 2009, the Commission approved the Company's proposal to implement an outreach and communications campaign. The objective of the program is to promote energy efficiency and conservation through education and increase customer awareness of and participation in the Company's DSM programs. In approving the campaign, the Commission directed the Company to monitor program effectiveness on an annual basis and to report on such assessments to the Commission. This report presents an assessment of year 7 (calendar year 2016) of the DSM outreach and communications campaign, including an evaluation of the program in meeting its objectives and a summary of year 7 program activities.

Customer Survey Results

The Company has conducted customer research each year from 2010 to 2016 to determine the effectiveness of the outreach and communications campaign in increasing the awareness of and self-reported participation in DSM programs. The findings of this survey work, along with program recommendations for 2017, are included below. Results from the MSI National Benchmarking Database Study support increasing the focus of the Company's outreach and communications budget to small-and medium-sized business customers. The change is also intended to align with the Company's IRP goals.

Research Methodology

A research study was conducted during the general timeframe of the Year 7 (2016) Campaign on customers' awareness and perception of the Company's energy efficiency and demand response programs. A third-party, independent market research firm conducted the study with customers via telephone interviews and online surveys.

- **MSI National Benchmarking Database Study –** 300 telephone interviews (for each residential and business) were completed June 2016. This study identifies the main ways residential and small- to medium-sized business customers' perceptions and evaluations of Rocky Mountain Power's performance impacts customer satisfaction. These responses are analyzed to understand perceptions of special topics related to Web interactions, billing, communication, and energy efficiency.

Key Research Findings – Residential customers

Advertising and communications recall

Approximately three-quarters of residential customers say Rocky Mountain Power does a "good job" of having programs that help customers use energy efficiently and providing information on how to control their electricity costs. Positive ratings are similar to 2015 findings. The Company remains a top quartile performer among 90 utilities in the 2016 MSI National benchmarking for providing information on how to control your electricity costs**.**

More than half of Rocky Mountain Power customers are somewhat or very familiar with the *watt*smart programs, and familiarity has increased from the 2015 level.

Actions taken to conserve electricity

Six-in-ten Rocky Mountain Power residential customers (59%) say they have taken action to reduce energy in the past year. "Installing energy efficient lights" and "turning off lights more frequently" remained the top responses among those who reported taking action; thermostat settings (both increasing and decreasing) saw a slight increase in response in 2016.

The percent of customers who reported taking actions to conserve energy has remained fairly constant over the past few years. The reason cited most often for reducing home energy use is both to save money and help protect the environment (55-62%). The second most cited reason is to just save money (33-37%). The most often mentioned action taken to save energy is installing energy-efficient lighting (34-48%).

Key Research Findings – Commercial customers

Approximately seven-in-ten (72%) Rocky Mountain Power commercial customers are aware of utility programs to help them use energy efficiently. About half (49%) give Rocky Mountain Power very high marks, giving the Company a score between 8-10 on the 10-point satisfaction scale.

Nearly seven-in-ten (69%) of Rocky Mountain Power customers believe their utility is doing a good job of providing information on how to control electricity costs.

More than six-in-ten (64%) customers say their utility helps their company by providing incentives to save money on their energy bills.

Approximately eight-in-ten (81%) Rocky Mountain Power customers feel their utility company does a "good job" of providing information about products and services that are of value to them and their organizations. This represents a significant improvement among Rocky Mountain Power customers compared to last year (81% versus 74%).

Nearly half (47%) of Rocky Mountain Power customers are familiar with the *watt*smart programs.

The majority of customers (54%) have taken actions to save energy within the past year to reduce their usage. Energy saving actions most commonly include installing efficient lighting (68%) or turning off lights more frequently.

Conclusions

The awareness level for being *watt*smart has remained fairly consistent and customers feel their utility is doing a good job of providing information. Customers are also taking action and as in years past, are more likely to conserve energy by using energy-saving lighting than any other method. Customers are driven to conserve energy both to save money and help protect the

environment. Moving forward, the Company plans to make a stronger connection between saving energy and money and helping the environment.

Campaign Activities

Communications, Outreach and Education

*watt*smart is an overarching energy efficiency campaign with the overall goal to engage customers in reducing their energy usage through behavioral changes, and pointing them to the programs and information to help them do it. "Rocky Mountain Power wants to help you save energy and money" is the key message, and the Company uses earned media, customer communications, education and outreach, advertising, and program specific marketing 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 programs, services and incentives.

In 2016, the Rocky Mountain Power employed a stronger focus on tying the *watt*smart concept to messages about others who are being *watt*smart and the benefits they received with a heavier focus on business customers while maintaining broad reach through traditional paid media and social media, community outreach, earned media outreach and digital (online) tools.

Earned media is managed by the Company's external communications department in cooperation with the customer and community managers located in Utah. "Earned media" generally refers to favorable television, radio, newspaper or internet news coverage gained through press releases, media events, opinion pieces, story pitches or other communication with news editors and reporters. A list of the new creative and new stories is included in Exhibit B.

Customer Communications

Beyond paid media, the Company also used statement communications, email, website, social media, and news coverage. Tapping into all resources with consistent messaging has been the Company's approach and will continue to be refined. As part of the Company's regular communications to its customers, support materials and newsletters across all customer classes, and the Company's website, promote energy efficiency initiatives and case studies on a regular basis. In May and October 2016, the Company included the *wattsup* newsletter for all residential customers. This bill insert provided information about *watt*smart energy efficiency programs and incentives prior to seasonal changes. Inserts describing specific energy efficiency programs and incentives and outer envelopes featuring energy efficiency messages and programs have also been used on a consistent basis. The Company uses the following tactics consistently to communicate to customers.

Website:

- rockymountainpower.net/wattsmart (wattsmart.com)
- URLs link directly to the energy efficiency landing page. Once there, customers can self-select their state for specific programs and incentives.
- Home page messages promote seasonal *watt*smart /energy efficiency each month.

Social Media:

- Twitter feed promotes energy efficiency tips and *watt*smart t programs multiple times per week.
- Facebook posts *watt*smart t messages three to five times per week.

Newsletters

- *Voices* residential newsletter is sent via bill insert (and email to paperless billing customers) six times a year; each issue includes energy efficiency tips and incentive program information.
- *wattsup* insert is a seasonal change insert dedicated to energy efficiency, distributed to customers in May and October.
- *Energy Connections* and *Energy Insights* newsletters target businesses and community leaders and contains articles on commercial and industrial energy efficiency as well as represented case studies on a monthly and quarterly basis.

***watt*smart Campaign**

Paid Media

The overall paid media plan objective is to effectively reach its customers through a multi-media mix that extends both reach and frequency. The audiences for communications were prioritized as follows:

- *PRIMARY*: Small and large businesses *SECONDARY*: Residential households in the Company's service area

Table 1 outlines the value provided by each communication channel.

Table 1 – Communication Channels

Communication Channel	Value to Communication Portfolio	Placement
Television Media demo: Adults 25-54, Primary: Small/Mid-sized businesses. Secondary: residential (English and Spanish)	Due to the strength and reach of the Salt Lake City designated market area, television is the most effective media channel.	April – September 2016: 13,105,000 impressions.
Radio	Given the cost relative to television, radio builds on communications delivered via television while providing for increased frequency of messages.	May – September 2015: 4,732,000 impressions.

Communication Channel	Value to Communication Portfolio	Placement
Newspaper	Supports broadcast messages and guarantees coverage of the Utah service territory.	April – September 2016: 3,849,590 impressions.
Facebook	Awareness for early adopters regarding energy efficiency tips and provides a centralized location to share information on how to be *watt*smart; feature incentive programs and other seasonal information. Information posted at least three times a week.	In 2016, Facebook advertising delivered 1.4M impressions, 22,009 clicks, and a CTR (click through rate) of 1.52% - which is 15.2 times above the National average of 0.10%
Twitter (@RMP_Utah)	Awareness for early adopters regarding energy efficiency tips. Tweets posted on a weekly basis.	As of December 2016 there were 4,921 Twitter followers in Utah.
Digital Display	Supports the broadcast and print media while also increasing awareness for early adopters who are online and are likely to be receptive to energy saving messaging. The campaign ran through Ad Network on Deseret News, KSL, YuMe, LinkedIn, and Hulu (streaming television).	Display advertising delivered 8.1M impressions, 41,665 clicks, and a CTR of .51% - which is 5.1 times above the national average of 0.1% The search campaign delivered 51,021 impressions, 752 clicks, and a CTR of 5.56% - which is 5.56 times above the national average of 1%. Average position was 1.7 (goal is to be top 3). The two year comparison shows 2016 with a lower CTR than 2015, due to campaign KPI's shifting to more engagement and website traffic measurement.
Magazine	Content targeting business and metro area customers.	2,579,886 impressions
Out of Home	Supports the broadcast and print media while increasing awareness.	33,957,94- impressions

Communication Channel	Value to Communication Portfolio	Placement
Event Sponsorships	Reaches consumers at popular events and ties the *watt*smart messaging to positive activities.	35,972,292 impressions

The total number of 2016 impressions for the *watt*smart campaign was 103,769,409.

Web links to the current portfolio of advertisements are included in Exhibit B of this report.

Public Outreach

The Company leveraged the messages initially developed in the communications campaign through various public outreach initiatives in 2016. Table 2 summarizes the Company's efforts to educate the public on the importance of implementing energy efficiency practices.

Table 2 – Outreach Initiatives

Initiative	Description
Salt Lake Real	Ads occurred: • Preseason – February • Regular season - March – October Included in sponsorship – about 19,000 fans per game • Television (for all local Team-controlled broadcasts) o In-game television broadcast :30 spot o In-game television open and close billboard • Radio o :30 pre-game spot o :30 in-game spot • Online - rotating banner ad on RealSaltLake.com • Signage o One minute LED Ribbon Board per home game; Runs in 15 second (:15) increments Runs pre-game, in game and post-game
University of Utah	The Company continued to use the "save your energy for the game" video to play at all home football and men's basketball games when the team is announced. The sponsorship also includes LED signage at all Home Football, men's basketball and women's gymnastics meets. Football (7 home games – about 45,000 fans per game): • Open ceremony video board feature for football • Messaging on the south end zone LED board and the Pro-Ad LED board

Initiative	Description
	One pre-game and one post game radio spot for all football games. Basketball (17 home games – about 10,000+ fans per game): • Opening ceremony video board feature for Basketball • Messaging on baseline LED boards for men's basketball games One pre-game and one post game radio spot for all men's basketball games. Gymnastics (6 home meets – about 14,000 fans per meet).
KUED	Weekly sponsorship of children's programming. These included quick tips from Slim the Lineman on how to be *watt*smart.
Ragnar Relay	The Company's *watt*smart program sponsored a team in the Ragnar Relay event. Twelve Company employees completed the 192 mile Ragnar Relay from Logan to Park City. The team spread the word about energy efficiency with messages on their shirts, vans and *watt*smart giveaways including sunscreen and buffs. This allowed them to engage other runners during the 192 mile event.
Education	The Company offers a "Be *watt*smart, Begin at Home" school 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 5th grade students. Teachers are provided instructional materials for use in their classrooms, and students are sent home with a Home Energy Worksheet to explore energy use in their homes and encourage efficient behaviors. A summary of NEF's 2016 activities and accomplishments is provided in Exhibit A. Presentations are based on state education guidelines. In fall 2016, nearly 12,000 Utah students participated in the curriculum, which includes 131 schools taught by 444 teachers. Students received "Home Energy Worksheets" and were asked to audit their homes to receive LED night lights as incentives. Teachers were eligible to receive $50 mini-grants for their classrooms depending on how many students completed their worksheet.
Multicultural Outreach	The Company provided outreach support at the Cinco de Mayo festival in West Valley City on May 7, 2016. The Company had a booth providing the *watt*smart message to nearly 20,000 attendees. Company representatives spoke to attendees about being *watt*smart. The sponsorship also

Initiative	Description
	included 120 commercial on Telemundo and 100 promotional announcements.

*watts*mart Business advocacy

The *watts*mart Business advocacy program is designed to create more awareness of the benefits of being a *watts*mart Business. The advocacy program is intended to generate awareness, participation, and lasting partnerships in the *watts*mart t Business program.

The Company partnered with the Salt Lake Chamber to provide energy efficiency and *watts*mart Business content for twice-monthly Utah Business Report radio segments presented weekdays on KSL. Content was created for social media posts about *watts*mart Business and relevant posts made by the Chamber were shared to Rocky Mountain Power followers.

Additional business advocacy outreach was conducted through the Company's involvement with the Utah Manufacturers' Association, at the Governor's Economic Development Summit, the Governor's Energy Development Summit and the Utah Sustainability event.

Program Specific Marketing

All energy efficiency program marketing and communications are under the *watts*mart umbrella to insure 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 *watts*mart campaign.

Home Energy Savings

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

Home Energy Savings program staff attended the Salt Lake Tribune's Home and Garden Festival March 11-13, 2016, at the South Towne Expo Center in Sandy, Utah. To help drive festival attendance, a news release was distributed to local media and admission coupons were inserted in customer bills leading up to the show. Total attendance at the spring show was approximately 41,900. More than 500 customers used the coupon or the online coupon code. Customers who visited the booth were provided a flyer to communicate the different upgrades that they can consider to make their homes *watts*mart. Festival attendees were interested in LED lighting, HVAC systems and insulation. Some customers inquired with program staff about *Home Energy Reports* and the Company's Subscriber Solar program.

Program staff also attended the Deseret News Home Show October 7-9, 2016, to help educate customers on energy efficiency and *watts*mart program incentives. Total attendance at the fall

home show was 26,246, an increase from 20154. Program representatives estimated 222 admission coupon redemptions.

In fall 2016, the Company promoted the low-cost *watt*smart Starter Kits to Utah customers with a press release, along with direct mail and email to targeted customers.

In 2016, program communications delivered approximately 537,494 impressions. A breakdown of estimated impressions by channel is shown in Table 3 below. These estimates do not reflect all of the customer, retailer and trade ally touchpoints.

Table 3 – *Home Energy Savings* Impressions by Channel

Communications Channel	2016 Estimated Impressions
Bill inserts	514,000
Direct mail	16,248
Email	7,246

In 2016, the *wattsmart New Homes* program was integrated into the *Home Energy Savings* program. Some changes to the website and collateral updates were made. The program continues to encourage home builders to incorporate energy-efficient measures in the homes they build.

Home Energy Reports

Home Energy Reports were mailed to approximately 275,000 customers quarterly in 2016, with two additional seasonal reports sent in May and December. Many customers also receive email reports with customized energy-saving tips. In addition, customers can access the program Web Portal with additional tools, insights and ways to save energy. Approximately 200 customers log in to the Web Portal each month.

In January 2016, reports included a promotion on incentives for home insulation upgrades as a way to increase comfort and savings.

Cool Keeper

Cool Keeper outreach was primarily completed to manage program attrition. Letters are sent to new occupants of homes with an existing Cool Keeper device. Rocky Mountain Power call center agents also provide brief information about the program to Utah customers when they call in for service requests and other inquiries.

*watt*smart Business

During 2016, *watt*smart Business communications encouraged customers to inquire about incentives for lighting, HVAC, compressed air, irrigation and other energy efficiency measures.

The program was marketed with radio, newspaper, magazine, eblasts, digital display and digital paid search advertising throughout the reporting period. Radio and print ads featured case study examples from program participants which were repurposed in social media. Quarterly eblasts directed viewers to the Company's website, wattsmart.com. This was in addition to direct customer contact by Company project managers and regional business managers, trade ally partners, articles in Company newsletters, Chamber newsletter outreach and content on the Company website, on Facebook and Twitter.

Three businesses were award the "*watt*smart Business Partner of the Year" at regional events. This award recognizes businesses that excel in achieving load reduction through energy efficiency. News releases and photos were released for each award presented.

The Company continued to use a *watt*smart "open sign" for businesses. Customers were photographed with the open sign and the photos were used newsletter articles, and social media posts.

Targeted direct mail was sent to approximately 1,800 Utah irrigation customers in the fall to encourage energy-saving retrofits. Emails focused on vertical markets were sent to office/retail, grocery/convenience stores and restaurant/lodging businesses. A separate webinar was held for restaurants and food service customers to educate and inform them about incentives and savings available to their industry.

During 2016, the program garnered 9,283,050 impressions. Breakdown of impressions by media type is shown in Table 4 below.

Table 4 – *watt*smart Business Impressions by Media Type

Communications Channel	Impressions
Radio	4,251,000
Newspaper	3,596,355
Magazine	518,700
Digital display	824,518
Search	9,160
Eblast	81,517
Irrigation direct mail	1,800
Total Impressions	**9,283,050**

Outreach Campaign Budget Results

The 2016 budget for outreach activities was $1,430,465, as presented in Table 5 below. Expense activities are summarized by the channel of communication.

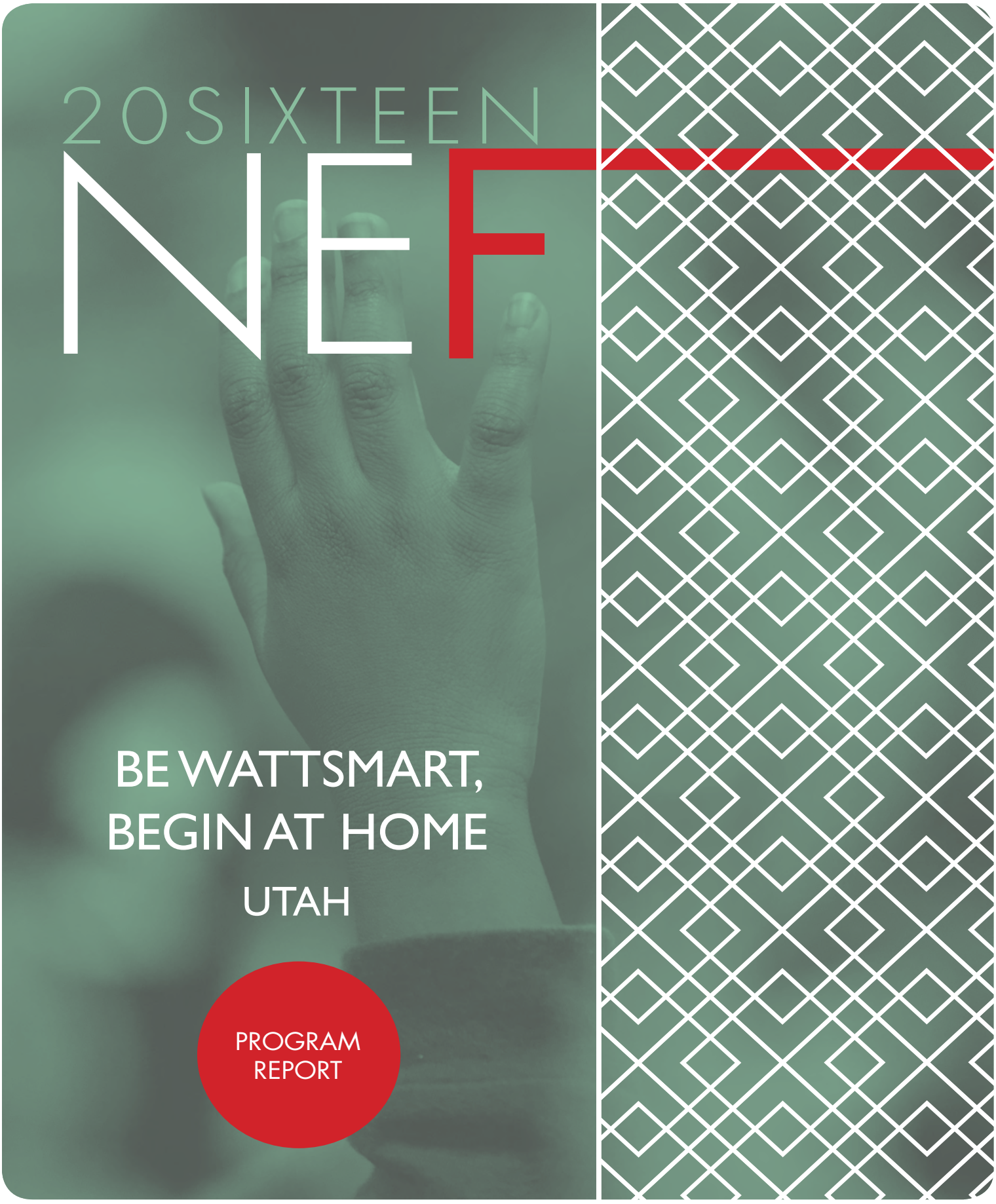
Table 5 – 2016 Budget, Actuals, and Variance

	Budget	Actuals	Variance
TV	$ 401,952	$ 484,357	$ 82,405
Radio	$ 73,344	$ 44,283	$ (29,061)
Print	$ 146,176	$ 111,776	$ (34,400)
Outdoor/Transit	$ 49,910	$ 34,400	$ (15,510)
Digital/Online	$ 153,778	$ 155,285	$ 1,507
Creative/Production/Planning	$ 150,000	$ 180,508	$ 30,508
Media pitches/ Event Support PR/Public Affairs	$ 60,000	$ 1,145	$ (58,855)
*watt*smart Business Advocacy Program	$ 75,000	$ 40,700	$ 34,300
Sponsorships (KUED, Real, and Ragnar)	$ 76,750	$ 59,976	$ (16,774)
University of Utah sports sponsorship	$ 55,555	$ 55,555	$ 0
Be *watt*smart, Begin at Home School Education Program (NEF)	$ 141,000	$ 156,226	$ (15,226)
U of U Student Energy Ambassador	$ 7,000	$ 0	$ 7,000
Multicultural Outreach	$ 15,000	$ 15,001	$ (1)
Research	$ 25,000	$ 0	$ (25,000)
Total	**$ 1430,465**	**$ 1,339,212**	**$ (91,253)**

ROCKY MOUNTAIN POWER
A DIVISION OF PACIFICORP

Exhibit A

National Energy Foundation



2016

NEF

BE WATTSMART, BEGIN AT HOME

UTAH

PROGRAM REPORT

Prepared for:

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Rocky Mountain Power

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Salt Lake City, UT 84111

Prepared by:

Marilyn Clark

Program Director

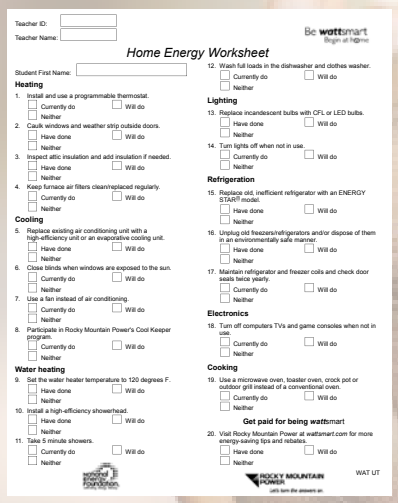
National Energy Foundation

4516 South 700 East, Suite 100

Salt Lake City, UT 84107

March 9, 2017

Savings



Teacher ID:

Teacher Name:

Be wattsmart Begin at home

Home Energy Worksheet

Student First Name:

Heating

1. Install and use a programmable 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. Participate in Rocky Mountain Power's Cool Keeper program.
   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 CFL or 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 ☐

National Energy Foundation

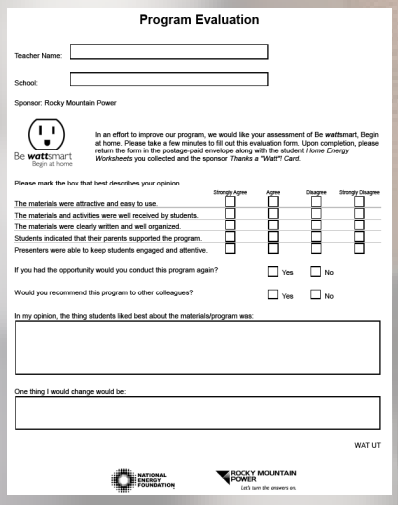
Rocky Mountain Power — Let's turn the answers on.

WAT UT

Home Energy Worksheets

– Returned: 8,385 –

– 74.24% –



Program Evaluation

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 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 *I Tune 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.	☐	☐	☐	☐
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 UT

National Energy Foundation

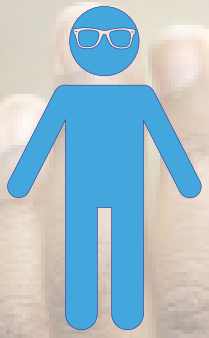
Rocky Mountain Power — Let's turn the answers on.

Teacher Packets

– Returned: 370 –

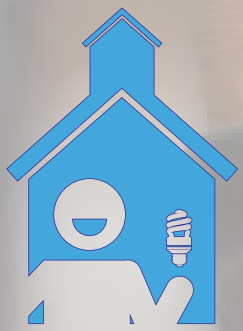
– 84.47% –

Participants



Students
– 11,245 –

Teachers
– 444 –



Schools
– 122 –

Table of Contents

Program Overview

Program Administration

The National Energy Foundation (NEF) is pleased to report on activities of the Be ***watt***smart, Begin at home energy efficiency education program conducted during the 2016 – 2017 school year. Our mission remains constant, to cultivate and promote an energy literate society. The objective is to provide Utah teachers and students with a quality educational experience and materials to support them in teaching and learning this valuable message. NEF acknowledges that through the support of Rocky Mountain Power, the Foundation has been able to move the mission forward. Thank you for your commitment to this very important task.

Be ***watt***smart, Begin at home is administered by the National Energy Foundation, 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, water, natural resources, science, math, technology, conservation, energy efficiency and the environment.

Anne Lowe, Vice President - Operations, oversees program organization. Gary Swan, Vice President - Development, oversees contract accounting. Marilyn Clark, Program Director, is responsible for the implementation of the scope of work and the program reporting. Patti Clark, Program Coordinator, oversees school enrollment and communication with teachers. Diane Baum, Program Scheduler, is responsible for scheduling presentations and teacher communication. A team of trained and seasoned presenters brought the interactive, hands-on program to Utah schools.

Program Summary

The fall 2016 Be ***watt***smart, Begin at home program provided quality energy education to schools in the Rocky Mountain Power Service territory. The program consisted of a 60-minute education presentation given to groups of fifth grade students and their teachers. Two professional presenters from the National Energy Foundation were involved in the implementation of each interactive program. Important energy concepts learned through these presentations were then communicated to Rocky Mountain Power households through the *Student Guide* and implementation of the *Home Energy Worksheet.*

Building Collaborations

The Utah State Office of Education's Core Curriculum for fifth grade correlate well to the content of Be ***watt***smart, Begin at home. Teachers appreciated the collaborative efforts to align program components to their core curriculum. Curriculum correlations were provided to teacher participants in their *Teacher Materials Folder* and also on the program registration website wattsmart.com/begin.

Promotional Materials (Implementation)

During the month of April 2016 the 18 schools wait listed from the 2015 program were contacted by phone call and informed registration for the 2016 program was available. Twelve of these schools participated in the 2016 program. 122 of the 2015 participating schools were emailed the invitation to register for 2016. Eight schools were not invited back due to very low HEW return rates. In August, a reminder to register email was sent to all priority unregistered 2015 participating schools. A promotional flier was sent to all qualified/unregistered teachers within the Rocky Mountain service territory.

Program Registration

Be *watt*smart, Begin at home was filled in September with 122 schools plus three additional schools with more than 160 students requiring a second presentation and counting as two schools. The 2016 program has 3 schools on a wait list for 2017.

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 other pertinent information.

Registration for the program was followed by a series of email communications with teachers, 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. Automatic email also contained live links to vital program documents such as the *Spanish Home Energy Worksheet* and *Spanish Student Booklet.*

Be wattsmart, Begin at home Presentation

Be ***watt***smart, Begin at home presentations were given during the period of September 19th through November 11th, 2016. The presentation featured a custom Keynote slideshow that brought energy concepts to the forefront of Utah 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 completed 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.

Student and Teacher Materials

A *Parent Letter* was provided to explain the importance of Be ***watt***smart, 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 a special reward, an Energy Star© rated nightlight featuring the Rocky Mountain Power Logo.

Educators were also given helpful energy educational materials. Each teacher participant was provided with a custom Be ***watt***smart, Begin at home folder. It contained a custom *Teacher Guide* with additional information and activities to supplement and continue energy education in the classroom. Also in the folder were the NEF instructional posters, *Renewable Energy* and *Bright Ways to Save Energy*.

A program *Implementation Steps Flier* assisted teachers in carrying out the program. It also gave simple steps for successfully returning the *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 Visa® gift card 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 2, 2016 deadline.

Program Accomplishments – Fall 2016

- 131 Be ***watt***smart, Begin at home presentations completed at 122 Schools
- 3 schools waitlisted
- 11,689 students and families reached
- 444 Utah teachers reached
- 74.24% *Home Energy Worksheet* survey return
- $50 Visa gift cards delivered to 333 Utah teachers
- $25 Visa gift cards delivered to 34 Utah teachers

Summary and Attachments

The National Energy Foundation is pleased to participate with Rocky Mountain Power in bringing this informative program to Utah teachers, students and families. The partnership between the organizations has been successful in developing and continually enhancing program deliverables. Be ***watt***smart, Begin at home is now an established part of the Utah educational community culture. It is also an important resource for bringing energy literacy to the forefront of fifth grade student education. Thank you for your continued commitment to Utah Schools.

- Fall 2016 Participating Schools
- Program Promotions
- Program Documents
    - Keynote Presentation
    - *Teacher Implementation Steps Flier*
    - *Rewarding Results Flier*
    - *Student Guide*
    - *Teacher Guide*
    - Lingo Card
    - Utah Core Curriculum Correlations
    - *Parent Letter*
- *Teacher Evaluation*
- *Teacher Evaluation* Compilation
- *Home Energy Worksheet* (English)
- *Home Energy Worksheet* (Spanish)
- Wise Energy Behaviors in Rocky Mountain Power Utah Homes
- *Home Energy Worksheet* Summary – Rocky Mountain Power
- Sampling of *Thanks a "Watt" Cards*

ATTACHMENTS

Fall 2016 Participating Schools

School Name	School Address	School City	State
Altara Elementary	800 East 11000 South	Sandy	UT
Arcadia Elementary	3461 W 4850 S	Taylorsville	UT
Aspen Elementary	945 West 2000 North	Orem	UT
Backman Elementary	601 North 1500 West	Salt Lake City	UT
Blackridge Elementary	14131 S. Rosecrest Road	Herriman	UT
Burch Creek Elementary	4300 Madison Ave	South Ogden	UT
Butler Elementary	7000 S. 2700 E.	Cottonwood Heights	UT
Butterfield Canyon Elementary	6860 Mary Leizan Lane	Herriman	UT
Cedar Ridge Elementary	4501 Cedar Hills Drive	Cedar Hills	UT
Centerville Elementary	350 North 100 East	Centerville	UT
Century Elementary	5820 North 4800 West	Bear River City	UT
Channing Hall	13515 S. 150 E.	Draper	UT
Cook Elementary	1175 W 1350 S	Syracuse	UT
Copper Canyon	8917 Copper Wood Drive	West Jordan	UT
Copper Canyon	1600 N. Broadway St.	Tooele	UT
Copper Hills Elementary	7635 West 3715 South	Magna	UT
Cottonwood Elementary	5205 South Holladay Boulevard	Holladay	UT
Crescent Elementary	11100 South 230 East	Sandy	UT
Crestview Elementary	2100 E Lincoln Lane	Holladay	UT
Crestview	185 W. Golden Ave	Layton	UT
D.T. Orchard Elementary	6744 West 3800 South	Salt Lake City	UT
East Elementary	255 E. College Ave	Cedar City	UT
Eastlake Elementary	4389 W Isla Daybreak Rd	South Jordan	UT
Eastwood Elementary	3305 South Wasatch Blvd.	Salt Lake City	UT
Elk Meadows	3448 9800 S	South Jordan	UT
Elk Run Elementary	3550 S Helen Dr	Magna	UT
Enoch Elementary	4701 Wagon Wheel Dr.	Enoch	UT
Falcon Ridge	6111 w 7000 s	West Jordan	UT
Fielding Elementary	90 West Main Street	Fielding	UT
Foothill Elementary	920 N 1240 E	Orem	UT
Fox Hollow Elementary	6020 W. 8200 S.	West Jordan	UT
Foxboro Elementary	547 N Foxboro Dr	North Salt Lake	UT
Freedom Elementary	10326 North 6800 West	Highland	UT
Gateway Preparatory Academy	201 E Thorough Bred Way	Enoch	UT
Geneva Elementary	665 W 400 N	Orem	UT
Goshen Elementary	60 North Center	Goshen	UT
Granite Elementary	9760 South 3100 East	Sandy	UT
Grantsville Elementary	50 S. Park	Grantsville	UT
Green Acres	640 E. 1900 N.	North Ogden	UT
Gunnison Elementary	550 So. 300 E.	Gunnison	UT
Hawthorne	1675 South 600 East	Salt Lake City	UT
Heritage Elementary	925 West 3200 South	Nibley	UT
Hillside	4283 South 6000 West	West Valley	UT
JC Fremont	4249 S. Atherton Drl	Taylorsville	UT
Jeremy Ranch Elementary	3050 Rasmussen Road	Park City	UT
Jim Bridger Elementary	5368 West Cyclamen Way	West Jordan	UT
John Hancock Charter	125 N 100 E	Pleasant Grove	UT
Jordan Ridge Elementary	2636 W. 9800 S.	South Jordan	UT
Lakeview Elementary	2025 West 5000 South	Roy	UT
Legacy Elementary	28 East 1340 North	American Fork	UT
Lincoln Academy	1582 W 3300 N	Pleasant Grove	UT
Lincoln Elementary	550 E Canfield Dr.	Ogden	UT
Lindon Elementary	30 N Main	Lindon	UT
Lomond View	3644 North 900 West	North Ogden	UT
Lone Peak	11515 High Mesa Drive	Sandy	UT
Magna Elementary	3100 South 8400 West	Magna	UT
Mapleton Elementary	120 W Maple	Mapleton	UT
McPolin Elementary	2270 Kearns Blvd	Park City	UT
Monte Vista	11121 S. 2700 W.	South Jordan	UT
Morningside	4170 South 3000 East	Salt Lake	UT
Mount Mahogany Elementary	618 N 1300 W	Pleasant Grove	UT

School Name	School Address	School City	State
Mountain Shadows Elementary	5255 W 7000 So	West Jordan	UT
Mountainville Academy	195 South Main	Alpine	UT
North Park Elementary	50 West 700 North	Tremonton	UT
Odyssey Charter School	738 East Quality Drive	American Fork	UT
Oquirrh Hills Elementary	5241 s. 4280 W.	Kearns	UT
Orchard Hills Elementary	168 E 610 S	Santaquin	UT
Orem Elementary	450 W. 400 S	Orem	UT
Park Lane	9955 South 2300 East	Sandy	UT
Parkside Elemantary	2262 North 1500 WEst	Clinton	UT
Parley's Park Elementary	4600 Silver Springs Road	Park City	UT
Peruvian Park Elementary	1545 E 8425 S	Sandy	UT
Philo T. Farnsworth Elementary	3751 South 4225 West	West Valley City	UT
Pioneer Elementary	250 N. 1600 W.	Ogden	UT
Plymouth Elementary	5220 S. 1470 W.	Taylorsville	UT
Providence Hall	4795 West Patriot Ridge Drive	Herriman	UT
Quest Academy	4862 W 4000 S	West Haven	UT
Riverside	1220 West 8737 South	West Jordan	UT
Rolling Meadows Elem	2950 Whitehall Dr	WVC	UT
Rose Creek Elementary	12812 S 3600 W	Riverton	UT
Rose Springs Elementary	5349 Insbrook Place	Erda	UT
Rosecrest Elementary	2420 Fisher Lane	Salt Lake City	UT
Roy Elementary	2888 W. 5600 S.	Roy	UT
Sandy Springs Elementary	242 N 3200 W	Layton	UT
Sandy Elementary	8725 S. 280 E.	Sandy	UT
Scera Park Elementary	450 S 400 E	Orem	UT
Settlement Canyon Elementary	935 W Timpie Road	Tooele	UT
Shadow Valley Elementary	4911 South 1500 East	Ogden	UT
Silver Crest Elementary	12937 South Elementary Drive	Herriman	UT
South Elementary	499 W. 400 S.	Cedar City	UT
South Jordan Elementary	11205 S. Black Cherry Way	South Jordan	UT
South Weber Elementary	1285 East Lester Street	South Weber	UT
St. Francis Xavier	4501 West 5215 South	Kearns	UT
Stansbury Elementary	3050 South 2700 West	West Valley City	UT
Summit	80 W Center St	Smithfield	UT
Summit Academy	1285 East 13200 South	Draper	UT
Summit Academy Bluffdale	15327 South Noell Nelson Drive	Bluffdale	UT
Summit Academy Independence	15327 South Noell Nelson Drive	Bluffdale	UT
Sunrise Elementary	1542 E. 11245 S.	Sandy	UT
Sunset Elementary	2014 N 250 West	Sunset	UT
Syracuse Arts Academy	2893 West 1700 South	Syracuse	UT
Taylor Canyon Elementary	2130 Taylor Ave.	Ogden	UT
Taylorsville Elementary	2010 W. 4230 So.	Taylorville	UT
Three Mile Creek	2625 South 1050 West	Perry	UT
Upland Terrace	3700 Sunnydale Drive	Salt Lake City	UT
Vae View	1750 W 1600 N	Layton	UT
Valley View Elementary	941 Orchard Drive	Pleasant Grove	UT
Valley View	2465 West 4500 South	Roy	UT
Vineyard Elementary	620 E Holdaway Rd.	Orem	UT
Voyage Academy	1891 North 1500 West`	Clinton	UT
Washington Elementary	420 North 200 West	Salt Lake City	UT
Wellsville Elementary	90 East 100 South	Wellsville	UT
West Jordan Elementary	7220 S. 2370 W.	West Jordan	UT
West Point Elementary	3788 W 300 North	West Point	UT
West Valley elementary	6049 W. Brud Dr.	WVC	UT
Westbrook	3451W 6200S	West Jordan	UT
Westland Elementary	2925 W. 7180 Sourth	West Jordan	UT
Westmore Elementary	1150 South Main Street	Orem	UT
Windsor Elementary	1315 North Main St.	Orem	UT
Woodrow Wilson	2576 South Main	South Salt Lake City	UT
Woods Cross Elementary	745 W 1100 South	Woods Cross	UT
Woodstock	6015 S 1300 E	Salt Lake City	UT

Be *watt*smart
Begin at home

Be wattsmart, Begin at home is an energy education program sponsored by Rocky Mountain Power that is available to you in the fall of 2016. This program focuses on the Utah State Office of Education fifth-grade core curriculum for electricity while showing students and teachers how wise energy actions make a difference. Here is what local teachers have to say about the program:

> **"The students enjoyed this program and it fits perfectly with our unit on electricity."**

> **"The circuit demonstration taught important electrical concepts and engaged students."**

Please join us in this important effort. You may qualify to receive a **Visa® gift card of up to $50** depending upon participation.

What:	A 45 - 60 minute educational presentation with FREE wattsmart energy education posters, activities and student materials
When:	September 19 - November 11, 2016
Where:	Your school
Who:	Fifth-grade students and their teachers
How:	Enroll at your earliest convenience to ensure a spot! **wattsmart.com/begin** or email **diane.baum@nef1.org**.

National Energy Foundation™
cultivating energy literacy

ROCKY MOUNTAIN POWER

wattsmart.com

Be *watt*smart
Begin at home

Dear Be *watt*smart, Begin at home 2015 program participant:

Thank you for participating in the Be *watt*smart, Begin at home program. Rocky Mountain Power will once again be supporting teachers in educating students on required energy standards during the 2016-17 school year.

As a former program participant, you have the opportunity to enroll your fifth-grade class in advance for the fall 2016 Be *watt*smart, Begin at home program.

The 45-60 minute school presentations include **FREE** wattsmart energy education posters, activities and student materials. They will be scheduled during the weeks of **September 19 – November 11, 2016.** Teachers may qualify to receive a Visa® gift card of up to $50 depending upon participation.

Register soon at wattsmart.com/begin to ensure your 2016 participation or email diane.baum@nef1.org.

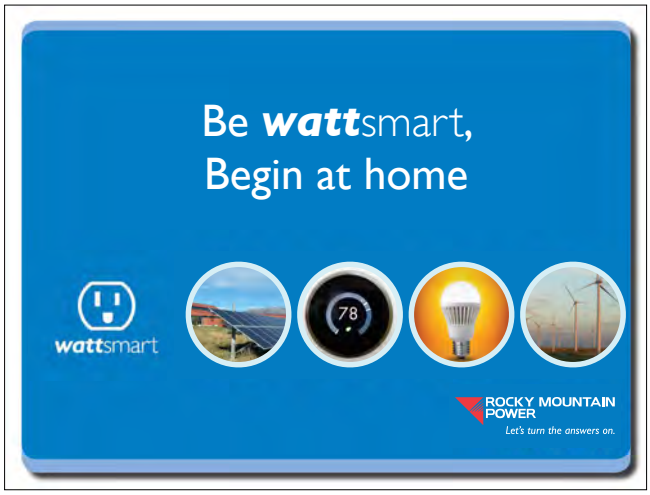
Thank you.

National Energy Foundation
cultivating energy literacy

ROCKY MOUNTAIN POWER
wattsmart.com

Program Documents

Keynote Presentation



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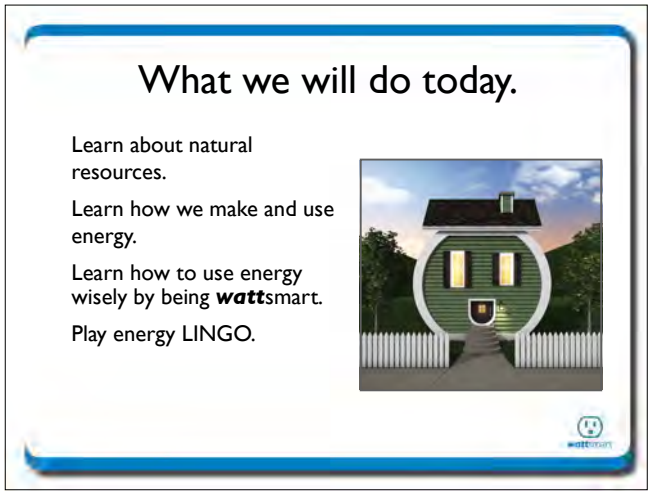

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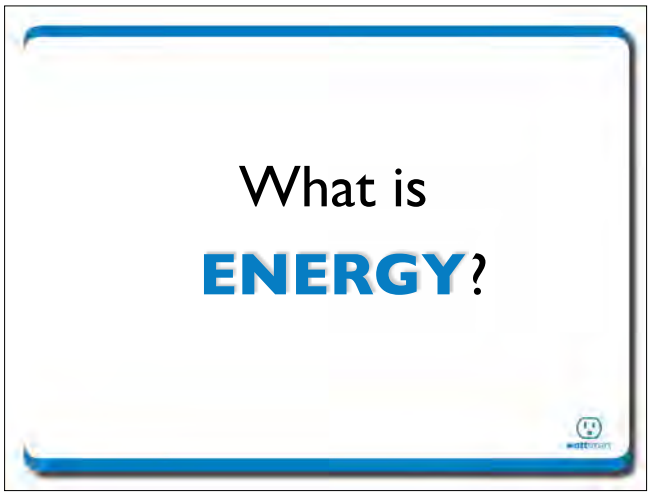

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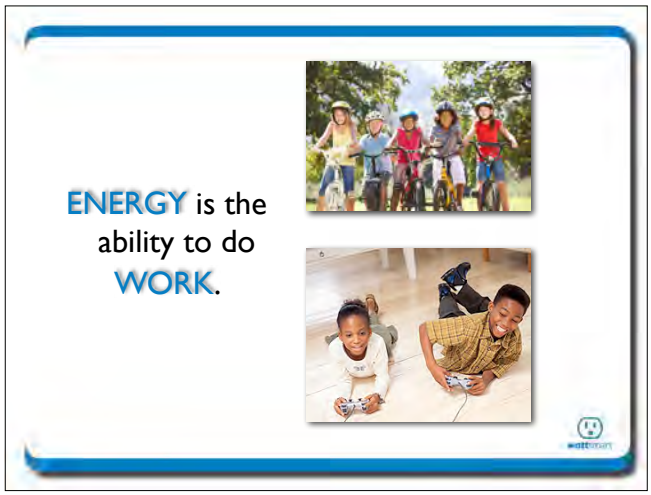

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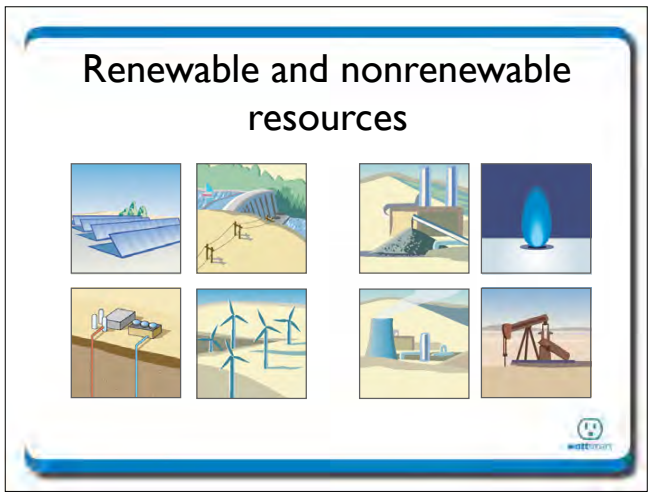

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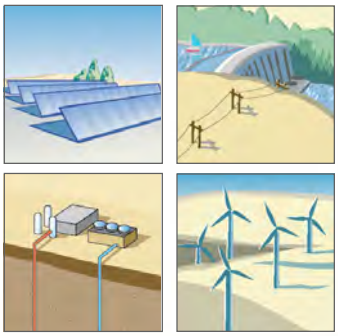
Renewable resources



7

Nonrenewable resources

8

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.

9

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**

10

Rocky Mountain Power

Electric generation by energy source

Coal 61.96%

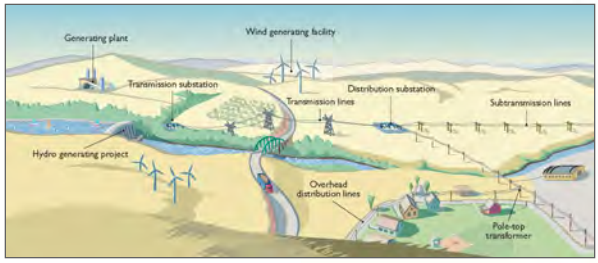
Renewables 13.17%

Natural gas 15.40%

Other sources 9.47%

11

Electric generation



12

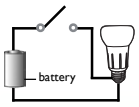
What is a circuit?

13

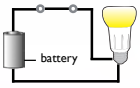
Let's make a circuit.

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

14

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.

15

Know what you want before you open the refrigerator.

16

Refrigerators and freezers

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

Decide what you want to eat quickly!

17

Use a fan to stay cool.

18

Home heating and cooling

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

- Use a fan instead of an air conditioner.
- Install a programmable thermostat.
- Look for the ENERGY STAR® label.
- Change furnace filters at least every 3 months.
- Insulate your home and seal air leaks.

19

Turn off the TV when you leave the room.

20

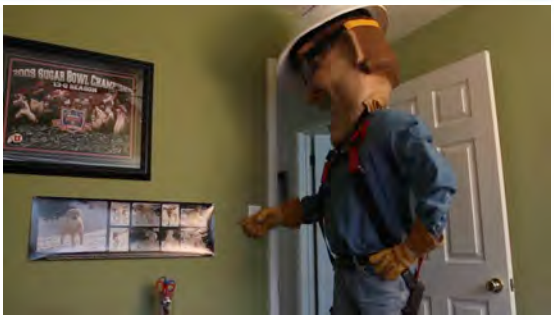
Electronics

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

- Unplug the thug. Beware of **phantom loads**.
- Turn off TVs, computers and game consoles when not in use.

- Use advanced power strips to reduce phantom load.

21



Turn off the lights when you leave the room.

22

Lighting

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

Turn off the lights when you leave a room.

Replace standard bulbs with CFLs (compact fluorescent light) bulbs or **LEDs** (light-emitting diode) light bulbs.

Let daylight shine in.

23

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**

24

Water heating

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

- Install a water-efficient showerhead.
- Take shorter showers.
- Turn off the water when brushing teeth.
- Tell your parents that your **water heater** should be set to 120°F.

25

Dishwashers

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

- Only run dishwashers when full.
- Use the "air dry" or "no heat dry" settings.

26

Laundry

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

- Wash clothes in cold water.
- Clean the lint filter in the dryer with each load.
- Use a clothesline whenever possible.

27

Cooking

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

- Use a microwave oven when possible.

- Use lids to shorten **cooking** time.

28

The 3 Rs

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

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

29

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 comfortable shower. **Water heater**
- To use less of something. **Reduce**

30

What have we done today?

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

31

Engage

Review your **Be *watt*smart, 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*.

32

***YOU** can make a difference when you are **watt**smart!*

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

33

Be ***watt***smart
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*)

2. Distribute to each student a:
    - **Be wattsmart, Begin at home** student booklet
    - *Home Energy Worksheet*
    - *Parent Letter*

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**.

ATTENTION TEACHERS!

Be ***watt***smart
Begin at home

Help us out by mailing your student *Home Energy Worksheets* and receive a **$25 - $50** Visa® gift card for classroom use, depending upon participation:

80% or greater return of registered students' *Home Energy Worksheets* = $50
50 - 79% return of registered students' *Home Energy Worksheets* = $25

Postmark due date:
December 2, 2016

Offer open only to teachers participating in Be wattsmart, Begin at home. Certain restrictions may apply. Good while grant funding is in place. *Home Energy Worksheets* must be completed for eligibility. For more information, contact Diane at diane.baum@nef1.org.

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wattsmart.com

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 their teacher.

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 a leading electric utility in the western United States. One of the lowest-cost producers of electricity in the U.S., Rocky Mountain Power provides more than 1 million customers in Utah, Wyoming and Idaho with safe, reliable, efficient energy. In addition, it is the second-largest rate-regulated utility owner of renewable, wind-generated electricity in the U.S.

About National Energy Foundation

The National Energy Foundation 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.

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.

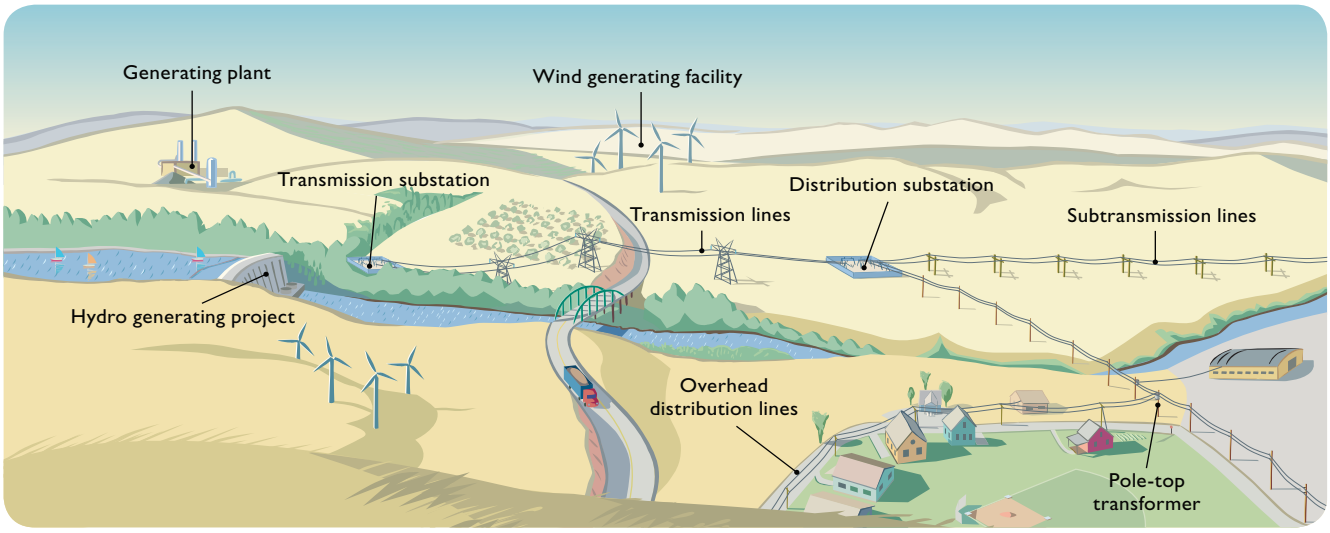
Electricity is the most abundant **secondary energy resource** used. It is the flow of electrical power or charge. It occurs in nature as lightning and static electricity. A generator uses energy resources to create mechanical energy that is then converted into electrical energy.

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

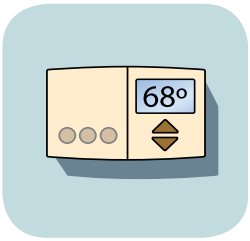
Energy resource	Rocky Mountain Power (2015 basic fuel mix)*	United States (U.S. EPA, 2013 data)
Coal	61.96%	39%
Natural gas	15.40%	27%
Renewables	13.17%	12%
Hydroelectric	5.18%	7%
Wind	7.10%	4%
Biomass	0.43%	1%
Geothermal	0.38%	--
Solar	0.08%	0%
Nuclear	0.00%	19%
Other/misc.	9.47%	3%
Total*	100%	100%

**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. 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 $50 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 CFLs (compact fluorescent light) or LEDs (light-emitting diodes) and save $5 to $8 per year per bulb. These bulbs use up to 75 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 **getenergysmart.org**.

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 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 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.

TABLE 1

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.

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

TABLE 2

	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			

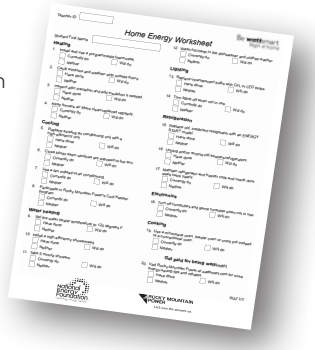
TABLE 3

	E	F	G
All CFLs		× $1.08	Annual cost of electricity with only CFLs
All LEDs		× $0.60	Annual cost of electricity with only LEDs

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).

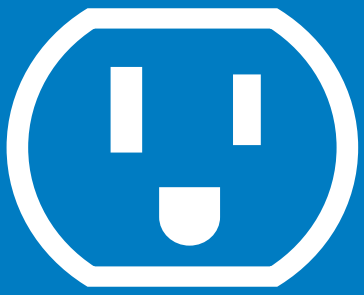
Be ***watt***smart – it's up to you

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

National Energy Foundation
cultivating energy literacy

*watt*smart.com

ROCKY MOUNTAIN POWER
Let's turn the answers on.

Be *watt*smart
Begin at home

TEACHER GUIDE

National Energy Foundation
cultivating energy literacy

ROCKY MOUNTAIN POWER
Let's turn the answers on.

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 *watt*smart, 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 *watt*smart, 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

Table of Contents

About Rocky Mountain Power

Rocky Mountain Power is a leading electric utility in the western United States. One of the lowest-cost producers of electricity in the U.S., Rocky Mountain Power provides 1 million customers in Utah, Wyoming and Idaho with safe, reliable, efficient energy. In addition, it is the second-largest rate-regulated owner of wind-generated electricity in the U.S.

About National Energy Foundation

The National Energy Foundation 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.

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 Guid*e activities to STEM skills and behaviors.

	Science				**Technology**				**Engineering**					**Math**			
Activity	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 wildlife and of natural resources such as forests, soil and water.

Energy efficiency: Managing the consumption of energy through the use of technologies and wise behaviors.

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 8 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

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:
   - enough energy to power the average American home for six months.
   - 7,000 gallons of water
   - 3.3 cubic yards of landfill space
   - 1 metric ton of carbon equivalent (MTCE).

   (EPA, 2014)

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

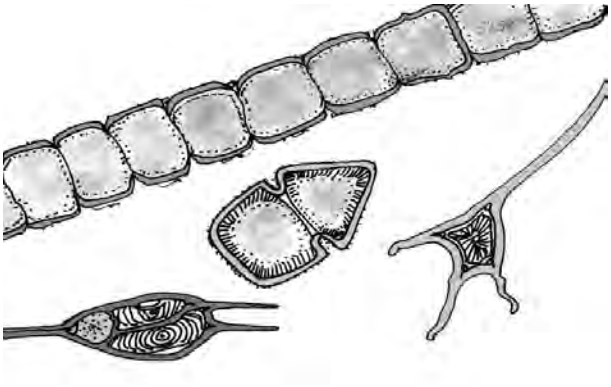
NOTE: You may do this as a demonstration, or have students do it in small groups.

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 down 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

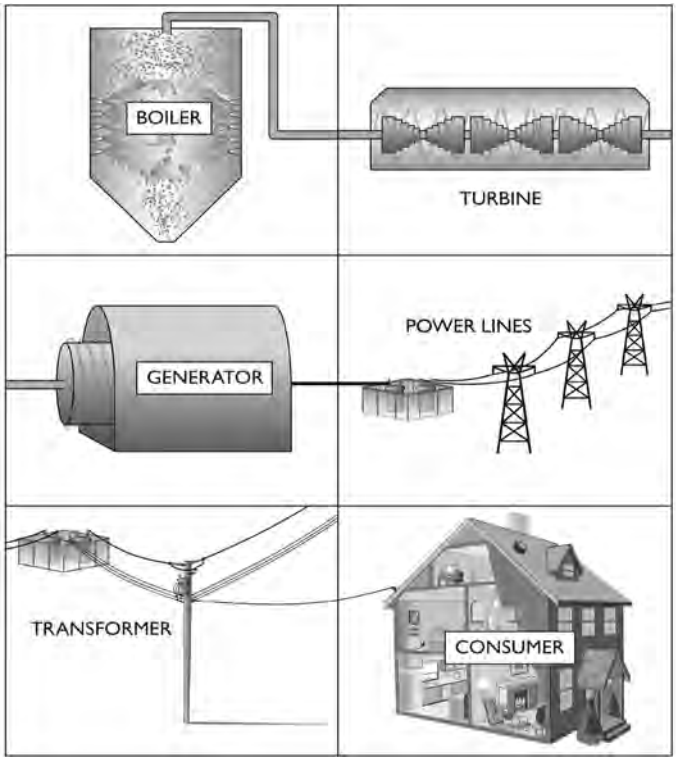
Technology

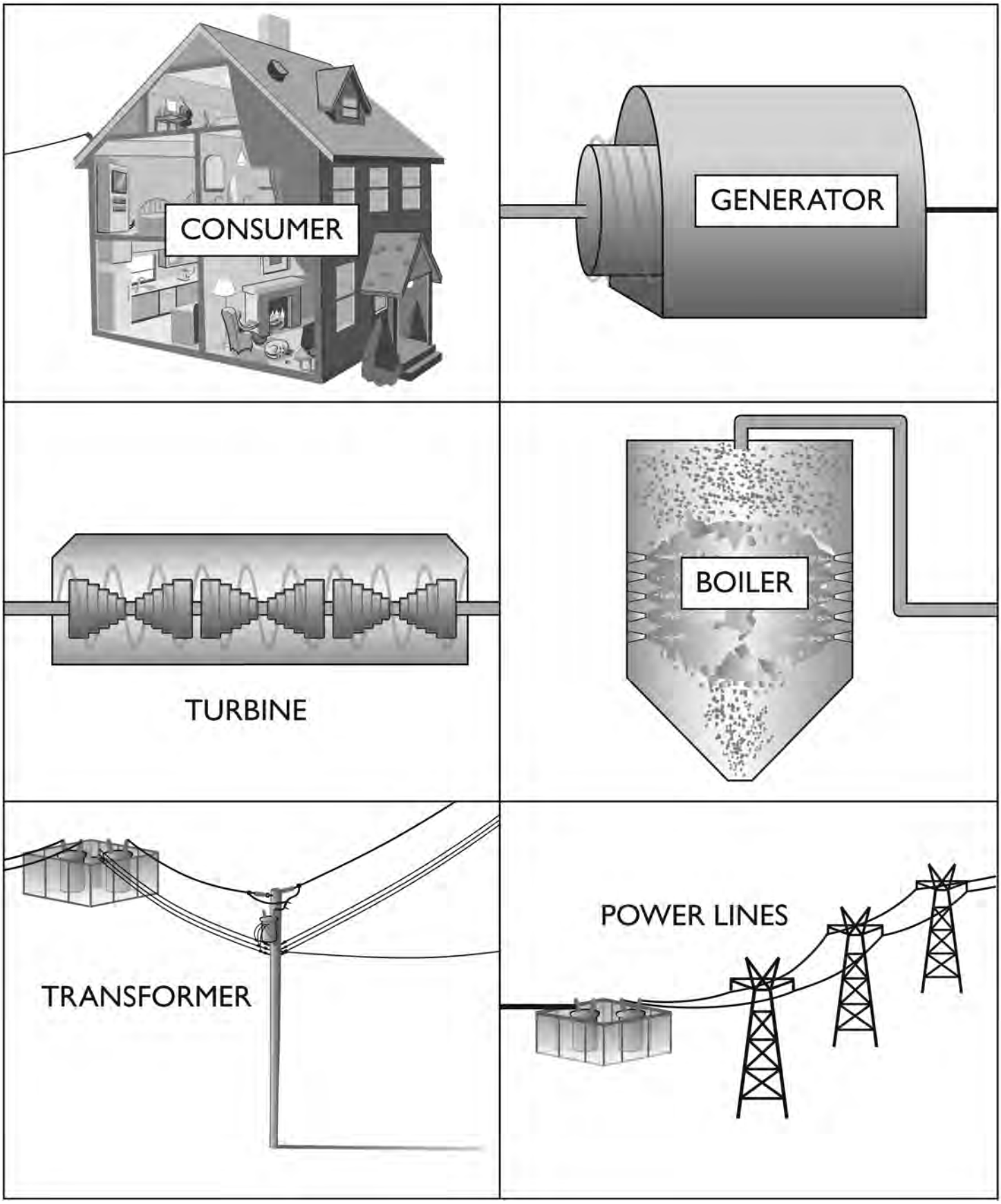
- Research Tools

Procedure:

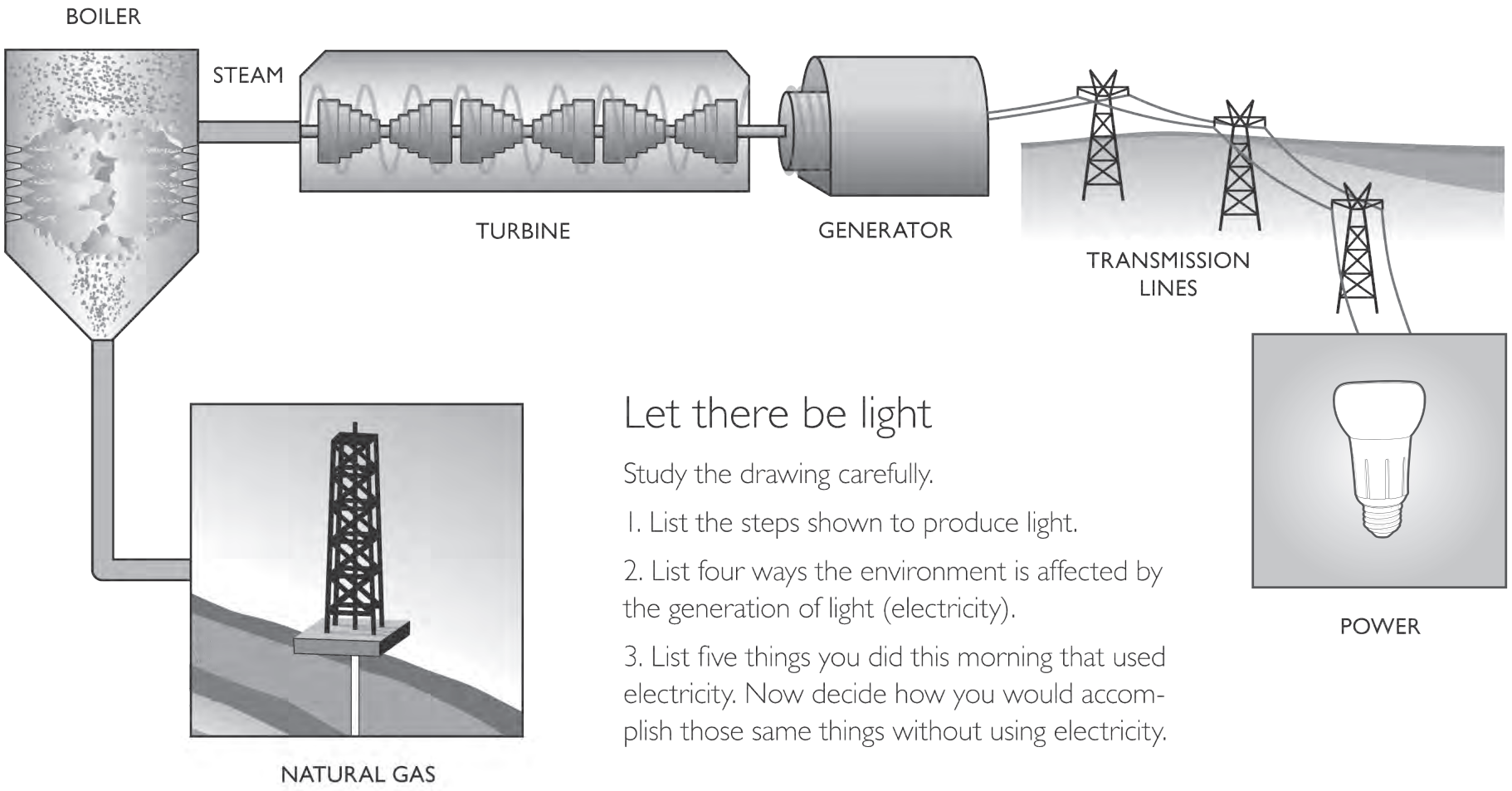
1. Ask students how their lives would be different without electricity. Where does electricity come from?
2. Pass out a copy of the "Electrical Generation Puzzle" found on the following page. Have students cut each part of the puzzle (transformer, turbine, generator, boiler, power lines and consumer)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

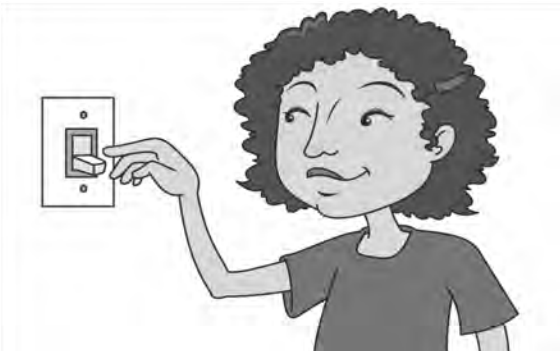
Energy Challenge

Discussion:
- What changes does your school need to make to be energy-efficient?

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 pre-determined 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

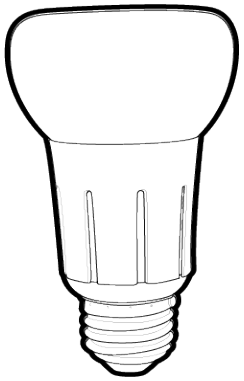
STEM Connection
Science
- Science as Inquiry
- Energy Sources, Forms and Transformations
- Science and Technology

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
   ■ $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%

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

Materials:

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

Instructions:

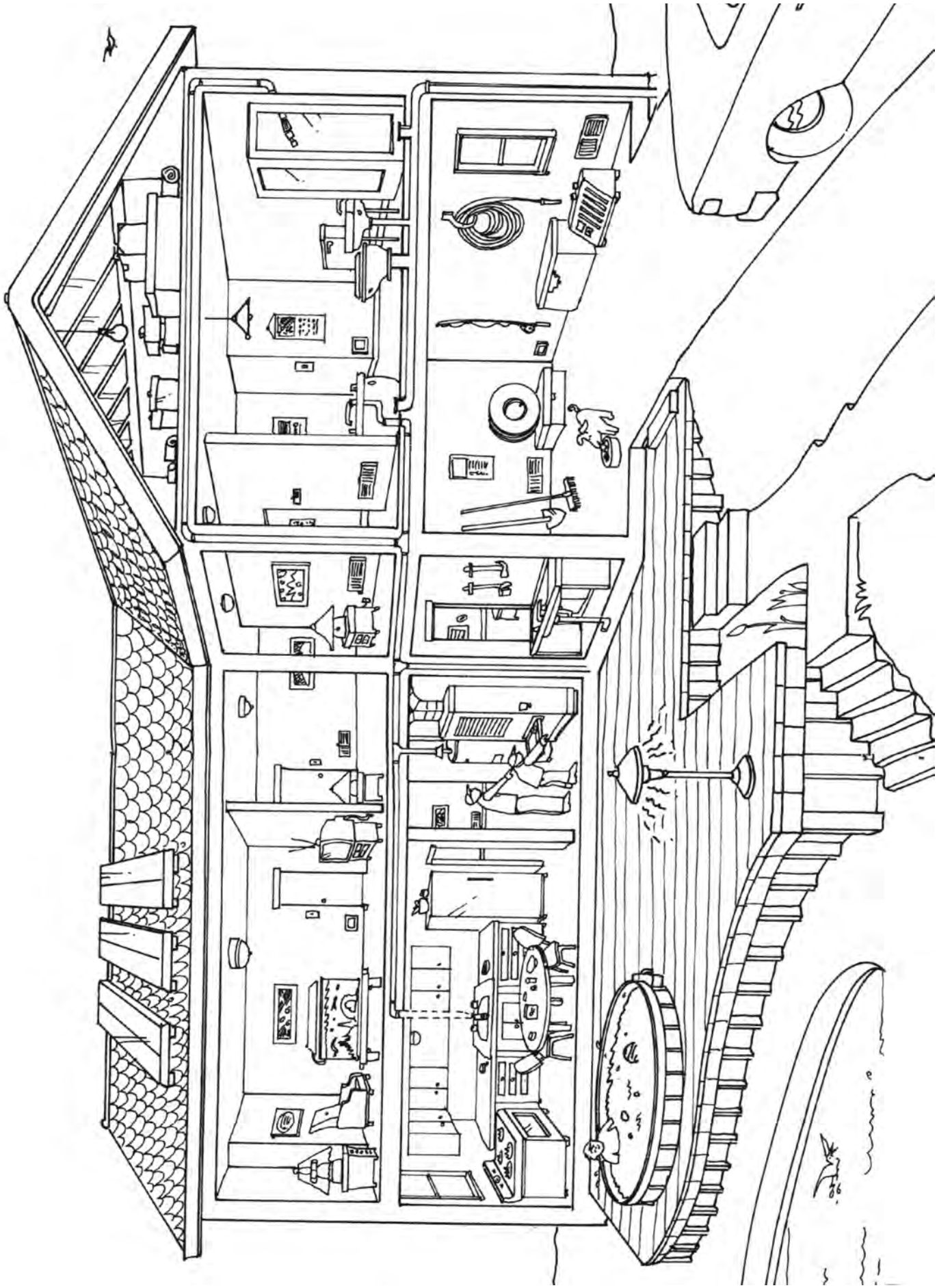
- Add or color the items below. You may want to do different items each day as you cover different topics: electricity, natural gas, water, etc.
- Add a bicycle.
- Add some recycling bins in the garage.
- Add some trees to shade the house.
- Add a ceiling or floor fan to the home for cooling.
- Put a 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 (CO_2) and other greenhouse gases you generate annually. The lower your footprint, the better!



Be **watt**smart

Begin at home

National Energy Foundation
cultivating energy literacy

wattsmart.com

ROCKY MOUNTAIN POWER

Let's turn the answers on.

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	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
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
Thermostat	Incandescent	Recycle	Uranium	Natural Resource
Reduce	78 Degrees	Embodied Energy	LED	Energy Efficiency

http://print-bingo.com

L	I	N	G	O
Natural Resource	Water Heater	Natural Gas	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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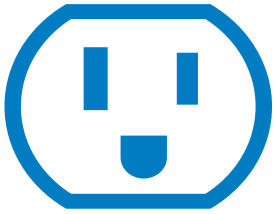
Be ***watt***smart, Begin at home		Teacher Guide Activities							
Essential Academic Learning Requirements	**Utah 5th Grade Correlations**	Energy Challenge - Embodied Energy	Conservation Cookie	Pass the Sack	Energy Ticket	The Search for Energy	Energy Challenge- Recycling	Where do Fossil Fuels Come From?	Energy for Electricity
Science	**Topic**	p.3	p.4	p.5	p.6	p.8	p.9	p.10	p.11
Intended Learning Outcomes (ILO): 1 - 6	Scientific process, experimentation, measurements, observations, conclusions, communication, how science affects life	1a,b,d; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a
Standard 1: Chemical Change	Evidence of a chemical reaction, daily life example, compare to physical change							3c,d	
Standard 4: Electricity	**Objective 2:** Behavior of current electricity								
Earth Day Every Day	Classroom and community projects improve local environment	X	X	X	X	X	X		
Social Studies									
Standard 5: US Role as a World Power	**Objective 3:** Current world issue and how the U.S. can be part of the solution		3b	3b	3b	3b	3b		
Math (Common Core)									
Number and Operations in Base Ten	Operations with multi-digit whole number and with decimals to hundredths		5.G.A.2		5.G.A.2	5.G.A.2			
Language Arts (Common Core)									
Reading	Reading for information, speaking and listening	SL.5.1	SL.5.1	SL.5.1	SL.5.1	SL.5.1	SL.5.1	SL.5.1	SL.5.1
Writing	Writing for effective communication				W.4.3				W.4.3

Be ***watt***smart, Begin at home		Teacher Guide Activities					Student Activities		Posters	
Essential Academic Learning Requirements	**Utah 5th Grade Correlations**	Energy Challenge-Energy Efficient	Insulation Tests	How Bright Is Your Light?	Energy in Math	Be ***watt***smart, Begin at home Poster	Presentation Information	Student Booklet	Bright Ways to Save Energy Poster	Electrical Generation Poster
Science	**Topic**	p.14	p.15	p.16	p. 17	p. 19				
Intended Learning Outcomes (ILO): 1 - 6	Scientific process, experimentation, measurements, observations, conclusions, communication, how science affects life	1a,b,d; 5a	1a-d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a-d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a	1a,b,d; 5a	1a,b,d; 5a	1a,d,f,h,i; 2a,c,e; 3a-c; 4b; 5a	1a,b,d,f,h,i; 2a,c,e;3a-c; 4a-c,e; 5a; 6c	1a,b,d; 2a,e; 3a,b; 4a-e; 5a	1a,b,d,f,h,i; 2a,c,e; 3a,b; 4a-c,e; 5a
Standard 1: Chemical Change	Evidence of a chemical reaction, daily life example, compare to physical change									
Standard 4: Electricity	**Objective 2:** Behavior of current electricity						2a,c-e			2a,c-e
Earth Day Every Day	Classroom and community projects improve local environment	X	X	X		X	X	X	X	X
Social Studies										
Standard 5: US Role as a World Power	**Objective 3:** Current world issue and how the U.S. can be part of the solution					3b	3b	3b	3b	
Math (Common Core)										
Number and Operations in Base Ten	Operations with multi-digit whole number and with decimals to hundredths	5.G.A.2	5.G.A.2	5.G.A.2	5.NBT.B.5			5.NBT.B.5		
Language Arts (Common Core)										
Reading	Reading for information, speaking and listening	SL.5.1	SL.5.1	SL.5.1			RI.5.6	RI.5.6	RI.5.6	RI.5.6
Writing	Writing for effective communication		W.4.3			W.4.3				

Be wattsmart 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 student 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*

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

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

National Energy Foundation™
cultivating energy literacy

ROCKY MOUNTAIN POWER

wattsmart.com

Program Evaluation

Teacher Name: _____

School: _____

Sponsor: Rocky Mountain Power

Be ***watt***smart
Begin at home

In an effort to improve our program, we would like your assessment of Be ***watt***smart, 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.	☐	☐	☐	☐
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 UT

National Energy Foundation
cultivating energy literacy

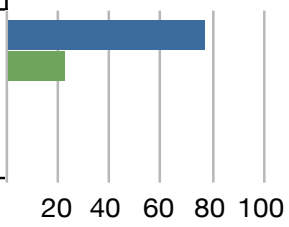
ROCKY MOUNTAIN POWER
Let's turn the answers on.

***Watt*smart Rocky Mountain program**
Program Evaluation Summary Report

ROCKY MOUNTAIN POWER
wattsmart.com

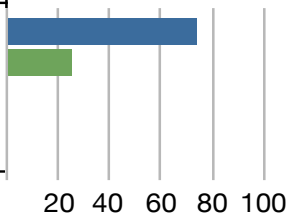
Materials were attractive and easy to use.

Response	Frequency	Percent
Strongly agree	243	77.1%
Agree	72	22.9%
Disagree	0	0.0%
Strongly disagree	0	0.0%
No response	0	0.0%



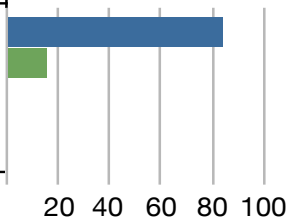
Materials and activities were well received by students.

Response	Frequency	Percent
Strongly agree	233	74.0%
Agree	81	25.7%
Disagree	0	0.0%
Strongly disagree	0	0.0%
No response	1	0.3%



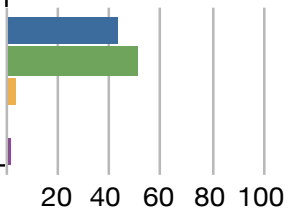
Materials were clearly written and well organized.

Response	Frequency	Percent
Strongly agree	264	83.8%
Agree	50	15.9%
Disagree	0	0.0%
Strongly disagree	0	0.0%
No response	1	0.3%



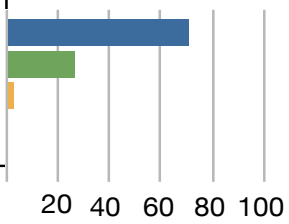
Students indicated that their parents supported the program.

Response	Frequency	Percent
Strongly agree	136	43.2%
Agree	161	51.1%
Disagree	12	3.8%
Strongly disagree	0	0.0%
No response	6	1.9%



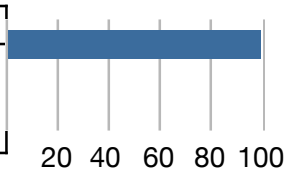
Presenters were able to keep students engaged and attentive.

Response	Frequency	Percent
Strongly agree	223	70.8%
Agree	83	26.3%
Disagree	7	2.2%
Strongly disagree	1	0.3%
No response	1	0.3%



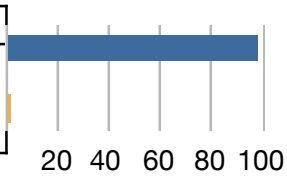
If you had the opportunity, would you conduct this program again?

Response	Frequency	Percent
Yes	313	99.4%
No	0	0.0%
No response	2	0.6%



Would you recommend this program to other colleagues?

Response	Frequency	Percent
Yes	309	98.1%
No	0	0.0%
No response	6	1.9%



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

Activities they were involved in.
All of it! I think it was one of the best presentations I have ever seen. It fit our curriculum and was a great add on.
All of it.
All the interactive parts, for example, the closed circuit, the power generation line, and Lingo.
Awareness brought to students.
Being able to participate.
Being able to participate.
Being involved!
Calling students up, the Lingo game, videos, and everything interactive. Thank you! This program has improved in so many ways. Thank you for making it tailored to the age group with he activities and learning methods.
Completing circuits with the tube thingy. Open/closed circuit.
Connecting the circuit while holding hands.
Creating the circuit.
Creating the human circuit, Lingo, and cartoon man in the videos.
Different sources of electricity. The presenters were engaging and did a wonderful job!
During our discussion they realized that they could make a huge difference.
Engaging powerpoint and slides.
Everything!
Excellent group participation and interest due to the information, activities, and involvement from presenters.
Fantastic program! The human circuit was a big hit. The visuals were also great. I like how you related the big picture to their everyday lives.
Finding ways they can make a difference in their world.
Getting a light when they brought their survey back.
Getting the night lights, and they liked the circuit activity too.
Getting the night lights.
Getting up and involved with LINGO, videos and demonstrations.
Good program! They liked the Lingo game.
Great interactive activities.
Great presenters! I love the games. different modalities in the presentation and presenter enthusiasm.
Hands on demonstrations
Having the opportunity to complete the worksheet at home and receive a night light.
How clear it was and how exciting the material was made by the presenters. They did a great job.
How engaging it was! They learned a lot about energy!
How interactive the presentation was.
How to conserve energy, for example, turn off water when brushing teeth, and turn off the lights.
I enjoyed the presentation. They workbook and materials were very effective.
I liked having the students participate in the group when the kids were conductors.
I loved how involved the students were. The kids loved Lingo!
I think any tools we can use to help them become more aware of who to wisely use the energy sources we have been given is beneficial.
I think they enjoyed how interactive it was. The energy stick and night lights were a hit! Thank you!
I think they loved the interactive video clips.
In my opinion the students loved the LINGO game and in keeping with that game they learned new vocabulary and new concepts. They seemed to enjoy the parent home assignment and the night light they received because of completion. P.S. I had a student move.
Interactive materials Student engagement
Involving the students.
It gets them thinking about electricity.
It gets them thinking thinking about electricity!
It helped me as a teacher plan my unit since it is my first year teaching this science core and students liked the content.
It is helping students develop a mindset of conservation and using energy wisely in a way they relate to. Interactivity with he students is key. Good job.
It is linked to things they need to lear win our curriculum.
It made the students think about how much they use electricity in their everyday lives.
It ties in with our Utah core standards.
It was interactive, hands on, engaging, educational, and relevant.

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

It was outstanding!
It was well presented and the power point game kept them engaged.
Kids love the Lingo game. They also get a kick out of the night lights.
Learning about energy and finding places on the large home picture where saving energy could happen. It made them realize they can contribute at their level.
Learning the facts about being Wattsmart at home.
LINGO
Lingo
Lingo Human Circuit Light bulbs for students to keep.
LINGO Slim
Lingo and getting a night light after they had completed the Home Energy Worksheet.
Lingo and the energy stick activity.
Lingo and the slideshow are well put together.
Lingo and the survey prize.
Lingo game and the videos!
Lingo game, and electricity open and closed circuits.
Lingo was fun. They also liked the night light.
Lingo was well liked.
Lingo, it kept them interested in learning.
Lingo, the night light, and the creating a current.
Love that I can apply this information into my curriculum! Love even more that my students refer to it when I ask for an example!
Love the interaction from the presenters with the students.
Love the program!
Loved the bingo game and the night lights.
Making a complete circuit and playing Lingo.
Making a complete circuit with their friends. They also were really enjoying their night light.
Making a human circuit.
Making the circuits using the light stick, Lingo, and the slim videos.
Making the human circuit, it was a crowd pleaser!
Making the sound effects in the presentation.
Manipulative are always helpful for students memory of an event or presentation.
Many of the kids have commented that they liked the program. They really like the night lights. Some of the kids were surprised at things they learned doing the home survey. They found it to be fun and exciting. As a teach I liked getting materials in advance.
My students love the nightlight. The powerpoint was also great, especially the videos.
My students loved the light.
My students loved your Lingo game and the worksheet. They loving dong "homework" with their parents.
Participating in front of the group for the demonstrations and also receiving the night lights for completing the home forms.
Participating in the activities, fun power point, and Lingo.
Playing Lingo and making the circuit.
Playing Lingo to help them learn the concepts presented.
Playing Lingo.
Playing Lingo. They loved it!
Playing the game.
PPT was colorful and great for keeping attention. Kids liked LINGO. Loved the night lights.
Presenters were well prepared. Interaction, participation, and the Lingo game. It was a great presentation, students really enjoyed all of it.
Showing how the circuit worked.
Someone else sharing information with students.
Standing together to create a current.
Students really love the hands on activities they got to participate in.
Talking about renewable and non renewable resources.
Thank you!
The activities, Lingo, and electrical sticks.
The activities.

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

The activity level was great. Lingo, the demonstrations involving students.
The bingo game to stay focused.
The Bingo game, the energy stick, and the night light as an incentive to fill out the survey.
The Bingo game, the student involvement throughout the presentation.
The bingo game.
The bingo, the human circuit, and the ability to participate in the learning.
The circuit activity.
The circuit connecting activity.
The circuit stick and Lingo.
The circuits the students made.
The current, anything interactive was amazing!
The demonstrations and Lingo.
The demonstrations that involved the students.
The demonstrations, especially the human circuit.
The demonstrations. My students love to see how it works.
The electricity demonstration.
The electricity stick and the interaction between the teachers and students.
The energy activities where they helped demonstrate an open and closed circuit. Thank you!
The energy stick and making a closed circuit.
The energy stick that was used to show a complete circuit.
The energy stick.
The energy stick.
The engaging activities and the game atmosphere.
The example of a "closed" vs "open" circuit. The reward nightlight.
The examples that connected with them, such as phone chargers, water, etc.
The experiments and visuals.
The favorite activity was making a complete circuit.
The fun Lingo game, the videos, and the question and answer session.
The fun way to learn about energy and how we need to be wise about the use of it. Loved the lingo.
The game.
The game.
The hands on activities and demonstrations.
The hands on activities for students.
The hands on activities.
The hands on activities.
The hands on activities.
The hands on activities.
The hands on activities.
The hands on activities.
The hands on activities. Especially when they to to be part of a circuit.
The hands on activities/demonstrations-they love getting up and moving and being part of the presentation.
The hands on activity and Lingo game.
The hands on circuit activity and the night light.
The hands on demonstrations.
The hands on demonstrations.
The hands on experiments.
The hands on interaction and Lingo.
The hands on materials.
The hands on pieces.
The hands-on activities were engaging and fun and really helped the students remember the process of getting and using our natural resources.
The hands-on activities.
The hands-on activities.
The high interest of the human circuit and the lingo game were very engaging.
The human circuit and getting a nightlight.
The human circuit and the night light.
The human circuit made with the energy stick. Presenters did a great job modifying for our demographic. They were awesome.
The human circuit.

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

The interaction with the presents. The students loved helping and participating.
The interactive activities
The interactive activities and the Lingo game.
The interactive activities with the energy stick. It was very entertaining and fun for the students.
The interactive activities.
The interactive circuit.
The interactive electricity, where they could make the tube light up by making a complete circuit.
The interactive games and pictures.
The interactive nature of the program.
The interactive presentation kept students engaged with the material.
The interactive, engaging presentation.
The interactiveness of the presentation really was engaging for the students. And the repetition and the variety of activities was also good.
The kids enjoy this program and it fits so well with core curriculum. They really like the Lingo and the circuits.
The kids enjoyed touching the energy tube.
The kids liked lingo and the funny electric company worker. They thought the night lights were great.
The kids loved the activities! The "buy-in" was great!
The kids really enjoy earning a night light. Thanks! That was so fun!
The ladies presented a very engaging, informative lesson in a fun and interesting way!
The Lingo and circuit circle.
The Lingo cards, they kept the kids focused.
The lingo cards.
The Lingo game and the two activities.
The Lingo game helped them retain what was taught to them.
The Lingo game kept students engaged in learning.
The lingo game kept them with the presenters. The pace kept the students attention.
The Lingo game to keep them engaged, and the night light for completing the home worksheet.
The lingo game was great, and the energy stick was very interesting.
The lingo game, and it flowed really well. The students enjoyed the program.
The Lingo game, it kept them very engaged.
The Lingo game.
The Lingo game.
The Lingo game.
The lingo game.
The lingo game.
The Lingo game.
The Lingo game.
The Lingo game. I think you could create a great cahoots with this material and really keep the students engaged.
The Lingo game. They didn't like the "big head guy", thought he was too childish.
The loved the demonstrations.
The magic created by the science experiments and the hands on enrichment experiments.
The night light and Lingo.
The night light and the interaction.
The night light of course. The colorful home handout packet, and the current stick experience.
The night light. That was a big influence in bringing back their papers.
The night lights and making a complete and incomplete circuit.
The night lights.
The night lights.
The nightlight opportunity, the videos and a variety of activities, along with the the Lingo game.
The open and closed conductor experiment.
The opportunities for the students to participate in the hands-on activities during the presentation.
The opportunity to make circuits comparing different conductors.
The participation with the presenters.
The powerpoint, hands on learning, and Lingo.
The presentation and getting a night light.
The presentation had lots of information, but it moved quickly along. They loved making the human circuit.
The presentation was bright and colorful. The interactive component with the lingo card was great!
The presentation was engaging and they liked Lingo of course. The interactive elements were really interesting and involving. Thank you! We love it when you come!

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

The presenters knew how to hold the students attention. The assembly taught the science core in a way my students will remember. Amazing!
The presenters were upbeat and positive. The kids loved it and learned a lot. Thank you!
The program is wonderful for the students. The students loved getting the night light. Presenters did a great job.
The reward.
The role play of how the gas goes from the ground to their house. They also love making the human circuit.
The search definition bingo cards were a hit.
The student participation in completing a circuit and the bingo game. Great visual aids.
The students and teacher loved the complete circuit experiment the most! The way the two ladies kept changing turns talking.
The students enjoyed learning about electricity and energy. They liked doing the Lingo game, and being involved in the energy chain. They were excited to get the night light when they brought back they surgery. Thanks!
The students enjoyed learning about power and how we get it.
The students enjoyed making a circuit and experimenting with them as conductors of electricity. Also, the lingo game was a fun way to break up the presentation. Great presentation! Thanks.
The students enjoyed the experiments, especially the closed circuit. The students also enjoyed the Lingo game.
The students enjoyed the hands on learning experience.
The students enjoyed the presentation and of course being able to earn a night light.
The students enjoyed the presentation. They were engaged with the Lingo game and the electrical circuits activity. The students had positive comments about their home energy worksheet. Thank you!
The students learned about phantom loads and a lot of the rest of it ties into our electricity unit.
The students liked playing the bingo game and the light wands that went on when they made a circuit.
The students liked putting their hands together and the light stick.
The students liked that it was interactive.
The students loved being in a large group and creating an open or closed pathway. They also enjoy the night lights.
The students loved doing the human circuit. They also enjoyed playing Lingo. I think that the presenters did a great job asking the students questions to see what they know.
The students loved getting the opportunity to participate in the demonstrations.
The students loved making the circuit and being a part of the activities.
The students loved the "Big Circle Circuit" activity. It amazed them that they could be energy conductors!
The students loved the demonstrations.
The students really enjoyed the lingo game and making a human circuit with the energy stick,
The students really enjoyed the Lingo game during the presentation.
The students really liked the energy stick and the discussion of open and closed circuits. They also liked being able to apply energy use to their everyday lives.
The students thought it was really cool when the presenters made the human circuit. They also liked the videos.
The students were engaged and learning.
The video clips the LINGO card The energy stick activity
The videos and the electricity demonstration.
The videos in the presentation and the energy stick.
The videos, Lingo, closed circuit activity, and moments to pause and talk about what they learned.
The videos.
The videos.
The whole presentation was organized, engaging, and presented in an interesting way!
The whole presentation.
The women are very engaging and the students loved the hands on demonstrations they did. They also loved Lingo!
They liked the hands on activities and the lights.
They could relate to what the presenters were teaching and informing them.
They enjoyed completing the circuit with the light they held. It was great to bring back to their memory when we discussed conductors.
They enjoyed playing Lingo throughout the presentation and enjoyed being a human conductor for the circuit.
They enjoyed the bingo game.
They enjoyed the hands-on activities and the night lights.
They enjoyed volunteering.
They got to participate in the program. The ladies did a great job.
They like the hands on, and the connection it made to science.

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

They liked participating in the activities and they enjoyed Lingo. I think they learned a lot, thank you!
They liked playing Lingo. They liked Slim and the video.
They liked the demonstrations with the volunteers, especially the part where they formed the human circuit.
They liked the game but the students would get out of control every time they marked a word. We will try better next time.
They liked the game that they played. They also liked the electric circuit that was created.
They liked the hands on parts best.
They liked the presentation, playing Lingo, and they liked earning the night light.
They love the group experiments, and the human circuit!
They loved all things hands on!
They loved being a part of the program as volunteers and building a circuit.
They loved doing the stand in a circle and complete the circuit activity. They also liked getting the lights for the survey.
They loved having "parent homework" and being able to get the night light. It was also great the presenters had enough energy sticks that all 90 kids got to have a hands-on experiment.
They loved how interactive the presentation was with the bingo game and demonstrations.
They loved its when they got to participate.
They loved learning about electricity and are now very excited for our electricity unit.
They loved Lingo. The powerpoint was effective.
They loved making electricity in a circle.
They loved the electricity sticks and learning about where power comes from.
They loved the experiment for open and closed circuits.
They loved the game and getting the night light.
They loved the hands on demonstrations. The static tubes were a huge hit, the students talked about them after the assembly.
They loved the Lingo game. The interactive game was fun. We all loved how enthusiastic the presenters were.
They loved the nightlight and the prospect of getting a class pet with the dollars they earned returning the survey and participating in the activities.
They loved the powerpoint presentation and of course, the night light. They also liked the discussion with their parents and the correlation of the presentation to what we are learning in class.
They really enjoyed the presentation and the night lights were a real draw.
They really liked the closed circuit light up activity.
They really liked the lingo game, short videos, and hands on participation.
They they got to get up and be involved.
This was the best presentation yet! It followed our fifth grade core and taught them about electricity and how it worked along with conserving energy.
To se the light go on and off.
Using Lingo during the presentation kept students engaged.
Very age appropriate and engaging for all.
Very student interactive, they loved the connectors, perfect for the kids!
We do this every year and love it!
When students were in a circle and electricity passed through-circuit. LINGO game throughout presentation
When the presenters showed the closed and open circuit experiment. That had the most impact.
When they were shown how their bodies were conductors of energy.
Your presentation is very engaging and my students learned a lot in a short amount of time. We definitely appreciate the money incentive, it helps our classroom.

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

A bigger picture to show how the energy travels, it was difficult to see on the slideshow.
A couple times prisoners moved on while students were still talking. Don't be afraid to wait until all students are respectful.
A few more hands on activities during the presentation would help the students be more engaged.
A model of a house with a wording circuit would be cool.
A model of a house with a working circuit would be cool.
Add a few more just "fun" pages to the activity book.
Allow all students to participate in hands on demonstration. Many checked out while the few students got to participate.
Allowing more than 12 kids to do the demonstrations.
An attention getter when students talk too much. Like you say "watt", the students respond with "smart" and are expected to be quiet after, just a thought.
An hour is a little long for 5th graders, but great information.
As a presenter, do not talk down to them as if they are little kids. They are but, but 5th graders hate being talked to as if they are little. More hands on.
Could be cool to have a review video that we could watch as a class after we got our papers in.
Different Lingo cards.
Do presentation with a smaller group. Instead of 4 classes, do 2 classes.
Even more clear, nailing the main points so it is more memorable to the student.
Even more curriculum fitting the Utah core science standards.
Even more interaction.
Every went really smoothly. The presenters were excellent.
Excellent program and presentation!
Find a way to get them involved more (less time in between activities)
For the first time I had parents contact me about why they are collecting family data through children and what the school gets out of it.
Get the kids to laugh, like joke or have the presenters do something memorable.
Giving students enough time to answer the questions. They didn't want more than 1-2 seconds before asking for an answer. So the same quicker students always answered the questions. Students don't process information as quickly as adults do.
Have a shorter presentation.
Have it later in the year as a review. Some of the information and activities have spoiled my inquiry based lessons.
Have students be sure to not have Lingo and pencil within reach during not the Lingo time.
Have two sessions so more students could be involved and less management issues.
I can't think of anything at this time.
I can't think of anything right now.
I could not get my students to turn in 80% of the surveys, even after passing them out a couple of times and bribes.
I had a substitute this day, she said you did a fabulous job.
I liked it.
I love this program, its very informative. I wouldn't change anything.
I think it is great! It really made students think how to save energy.
I think it was just right!
I thought everything was great. The program gets a little bit better every year.
I thought it was great! Anything interactive is always fun!!
I thought the program was engaging enough and education enough to warrant another 5 to 10 minutes. However, the materials given to us as teachers could help us give and provide additional instructions.
I wish the pamphlet had students activity pages instead of just info.
I would add more hands on activities.
I would change nothing! Our presenters were prepared, organized, and entertaining. They looked very professional and knew exactly what they were talking about. The pace of the program was great!
I would change up the pacing a bit. There were a few times of to slow and pace when presenting.
I would have had it in a room outside the classroom and maybe earlier in the day.
I would make better use of the activities in the teacher guided to supplement the presentation.
I would not change anything! Well done!
I wouldn't change anything.
I wouldn't.
I'm sure everything can be improved or at least tweaked, but if this were done the same way it would be great.
If you had the ability to use your presentation on a SMART Board it might be easier for you.
In title 1 schools, it might benefit the lower income students to have 2 different sessions of this program. A lot of students had problems discussing this with families.

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

Include more engagement strategies for all students.
It could be bit shorter.
It was a great program, don't change a thing.
It was all great.
It was excellent! Thank you.
It was great!
It was great!
It was too long. One hour is too much out of the day and the students lost focus!
It's such an informative experience that I wish we could do it later in the year, closer to end of year testing.
Just an idea. It was great already...
It would be fun to see a larger variety of items that can be tested as to its ability to conduct electricity.
Keep making as many connections to the core as possible.
Keep them a little more engaged, videos, and more hands on activities.
Keeping students engaged better near the end of the presentation.
Last year all of the kids got to participate in the human circuit but that didn't happen this year.
Less creepy mascot.
Let each child answer to a partner so they feel hear. Then bring them back and call on one.
Lingo does not seem very effective.
Make it a little longer with more time for each student to try things out.
Make it a little shorter. It lost the students engagement towards the end.
Make sure presenters talk of 5th graders, not 1st graders. Also keep gift/treat for returning surveys a surprise.
Make sure they are paying attention, and being respectful. Paper and pencils being used also require good management.
Make the posters less cartoonish so they can relate to real life.
Make the presentation shorter.
Management and expectations need to be outlined to the students so that they know how to act.
Maybe even more displays and hands on activities.
Maybe I would try to add one more experiment into the presentation.
Maybe small prizes for the Lingo game.
Maybe use a grant to leave one of those tube thingys with each teacher.
Meeting in such a large group diminished the impact of the presentation. Students would have been more engaged in small groups with hands on.
More exciting videos to keep students engaged.
More explicit directions on the Lingo game.
More games.
More hands on activities and student participation activities.
More interactive activities.
More interactive.
More student involvement, but overall the program was very well done.
More student involvement.
Moving all three classes in the same room for the presentation.
Natalie was a great presenter, but Gail has a hard time keeping their attention.
Next time, I will have the library or gym reserved so students are more comfortable.
Nope, love it!
Not as long of an assembly.
Not one thing!
Not one thing! It was fantastic! Best guest presentation ever!
Nothing caught my eyes to change.
Nothing I can think of, thank you!
Nothing it is wonderful .
Nothing it was great!
Nothing needs to be changed, it is great. Thanks!
Nothing really. I wish we could change parent support but we can't. I had some refuse to do the survey, but I talked them into writing their reason on the back of the survey and turning it in.
Nothing-it was great.
Nothing-we love the program.
Nothing, I enjoyed every minute of it.
Nothing, I really enjoy it!
Nothing, I think the presentation is great!
Nothing, I thought it was great!

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

Nothing, I thought it was great!
Nothing, it was awesome! Thanks!
Nothing, it was great.
Nothing, it was wonderful!
Nothing!
Nothing! everything was great!
Nothing! It was great!
Nothing! Presenters, Jan and Peg, were great! My students loved Peg's dancing!
Nothing! Thank you!
Nothing! We love your program! Thank you very much!
Nothing. The presenters took turns which makes the pace seem faster. All the materials are easy to understand.
Nothing. This is an excellent program that gets students and their families thinking about power consumption.
Nothing. This is an excellent program. The presenters are fantastic and have great rapport and display presentation and enthusiasm.
On the Home Energy Worksheet write instructions if you need an X or check mark filled in the box. Some parents did a check mark very lightly or big and I wasn't sure your scanner would pick up the mark.
Presenters may want to verify the students understand behavior expectations before presenting.
Presenters need an attention grabber to get kids back on track.
Probably more hands on activities for the whole class.
Some more interaction.
Some of the pictures on the presentation were a little small to be seen by a large group.
Some of the slides were just read in the presentation and the kids started to loose focus. If they are going to be read, maybe have the students do it.
Some smaller group activities for higher engagement.
Teach it to smaller groups.
Tell the kids there aren't any prizes for winning Lingo ahead of time. Or give a few?
Thank you!
The "come on" of a contest with a prize when there is no prize for the contest, only a light for returning homework.
The amount of students we has was too large. A smaller presentation would have been more beneficial.
The audience's behavior. I feel like some students need to show more respect to the presenters.-I am sorry for the poor behavior.
The directions for the parents to fill out, some were confused.
The documents are so knowledgeable. I feel like the kids would get more out of their presentation if they didn't have to teach to such a large group. Smaller classes would be great.
The kids liked the video clips, it would be fun to have a few more of them.
The length of the presentation.
The presentation was too long.
The presenters asked half of their audience about 50 kids to participate in the energy activity. Those who participated, loved it. However, those who were left in the audience couldn't see. They missed out. Also, teachers were asked to join the kids participating. By doing this, teachers couldn't damage control the audience. Next time, do a small group on the stage so everyone can see.
The presenters were late, snappy and impatient. It seemed as if they didn't want to be there.
The program is a bit long for students.
The program is a bit long for students.
The time when they came so it would be during our electricity unit.
There isn't anything I would change.
There really wasn't anything that needs to be changed!
They involved a lot of students in the demonstration, but then when they were standing and doing it the students sitting down could see and it made it harder to keep them engaged.
They number of ways to help conserve. Children don't usually wash clothes or have control of how food is cooked. Ideas that are extremely applicable work better.
They survey, quite a few parents commented that they thought it asked too many questions.
Two presentations instead of one for our large group.
use a microphone.
Use a microphone.
Visit all 5th grade classes, not just one.
We enjoyed it!
We needed a bigger room.
When yo are giving out lots of information, I like you play Lingo.
Write how the information from the surveys will be used so the parents are more understanding and less suspicious.

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

Your original email to us went into the junk folder, so we didn't know the kids needed a pencil. We got some, but it took a few minutes.

Teacher ID: _____

Teacher Name: _____

Be *watt*smart
Begin at h⊙me

Home Energy Worksheet

Student First Name: _____

Heating

1. Install and use a programmable 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. Participate in Rocky Mountain Power's Cool Keeper program.
   ☐ 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 CFL or 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 *watt*smart

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

National Energy Foundation
cultivating energy literacy

ROCKY MOUNTAIN POWER
Let's turn the answers on.

WAT UT

Home Energy Worksheet (Spanish)

Nombre del Profesor(a): _____

Ser ***watt***smart
Empieza en casa

Verificación de la Energía Doméstica

Nombre del Estudiante: _____

Calefacción

1. Instalar y usar un termostato programable.
   ☐ 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/ reemplezarlos 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. Participar en el programa "Cool Keeper" de Rocky Mountain Power.
   ☐ Lo hago ☐ Lo haré ☐ Ninguno

Calentadores de 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 CFL o 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, un olla de cocimiento lento o un parrilla de aire libre en lugar del horno convencional.
    ☐ Lo hago ☐ Lo haré ☐ Ninguno

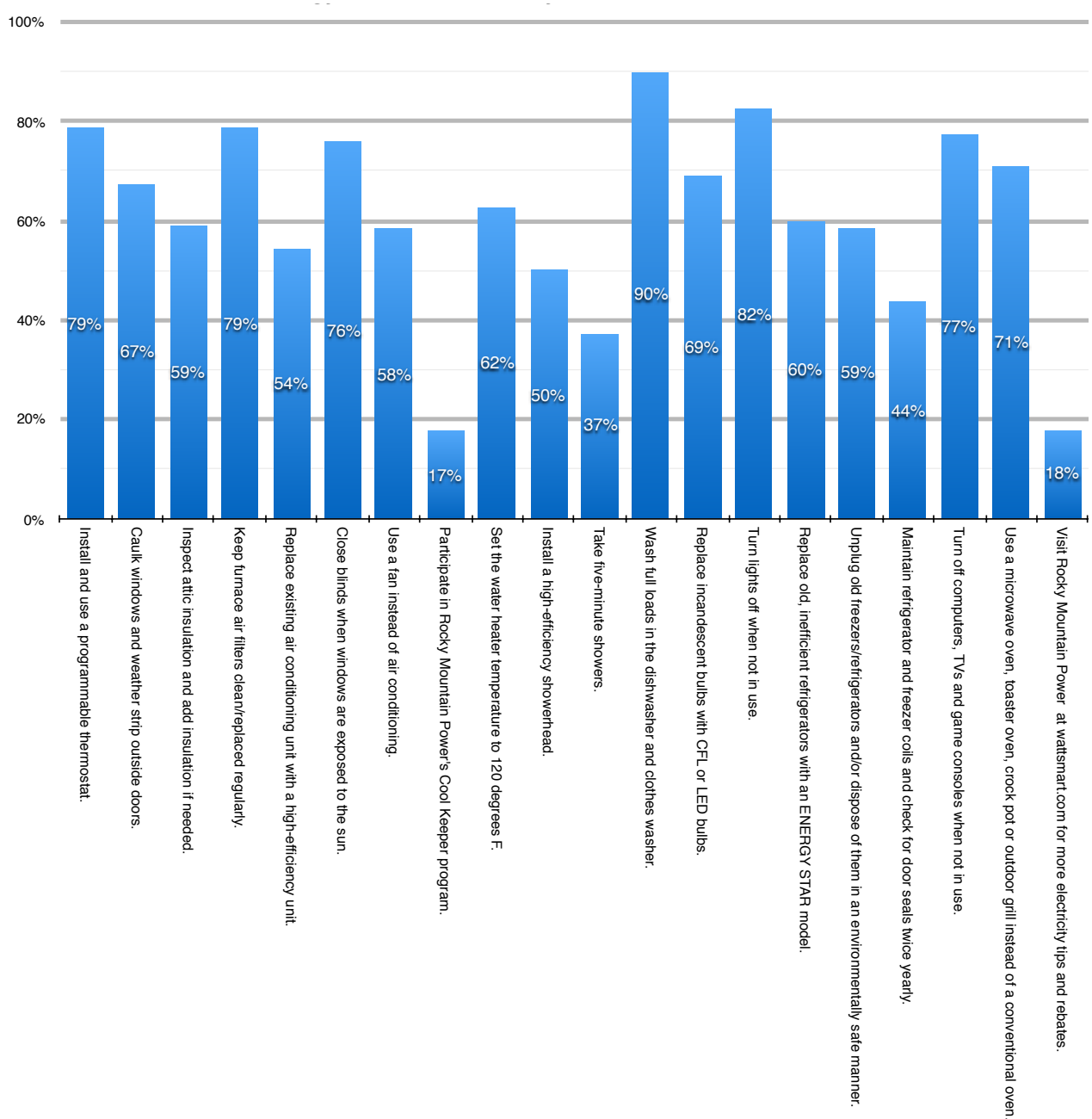
Reciba paga siendo *watts*mart

20. Visite Rocky Mountain Power en *wattsmart.com* para obtener más consejos y rebajas de ahorro de energía.
    ☐ Lo he hecho ☐ Lo haré ☐ Ninguno

National Energy Foundation
cultivating energy literacy

ROCKY MOUNTAIN POWER
Hagamos brillar las soluciones.

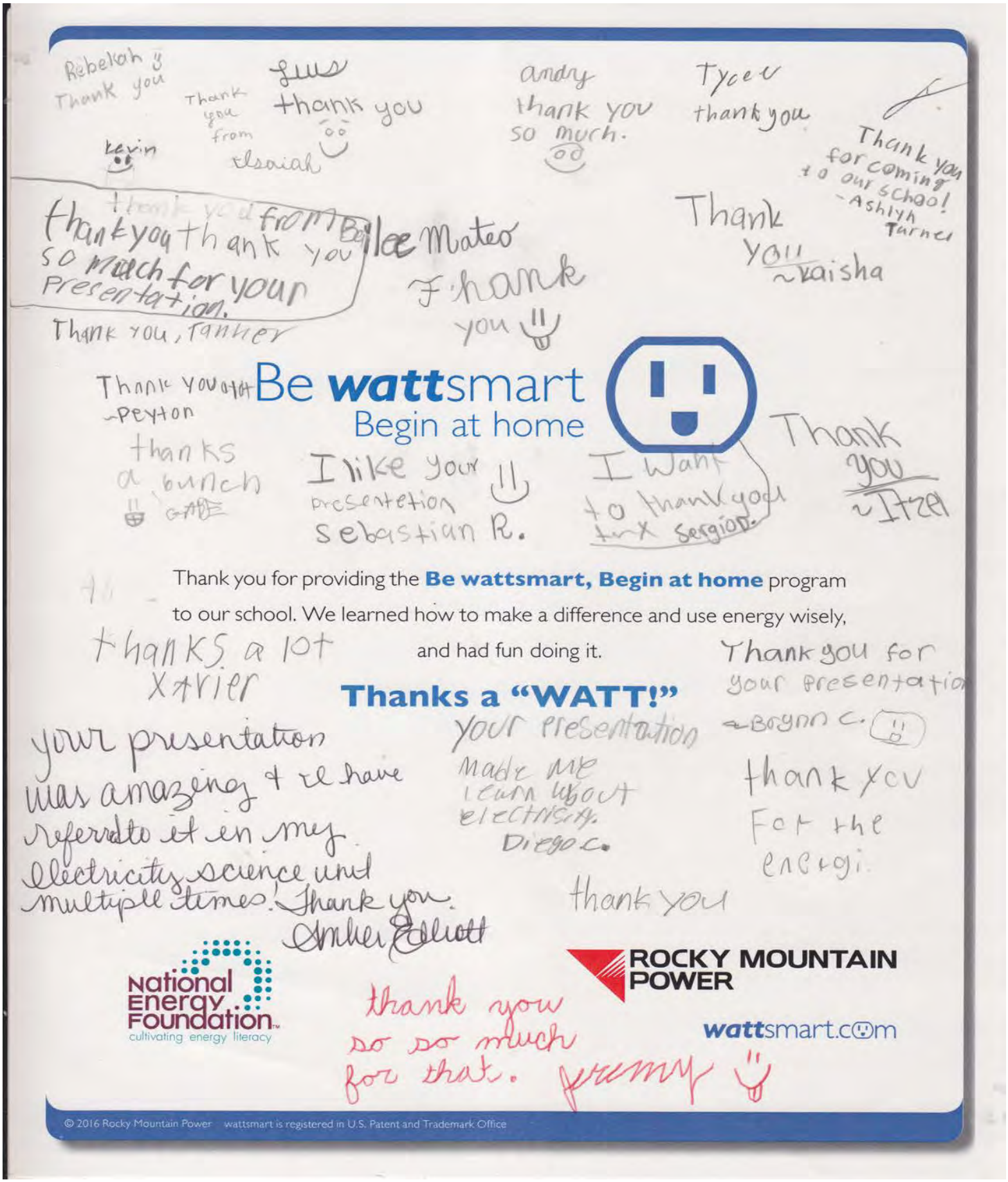
Wise Energy Behaviors in Rocky Mountain Power Utah Homes

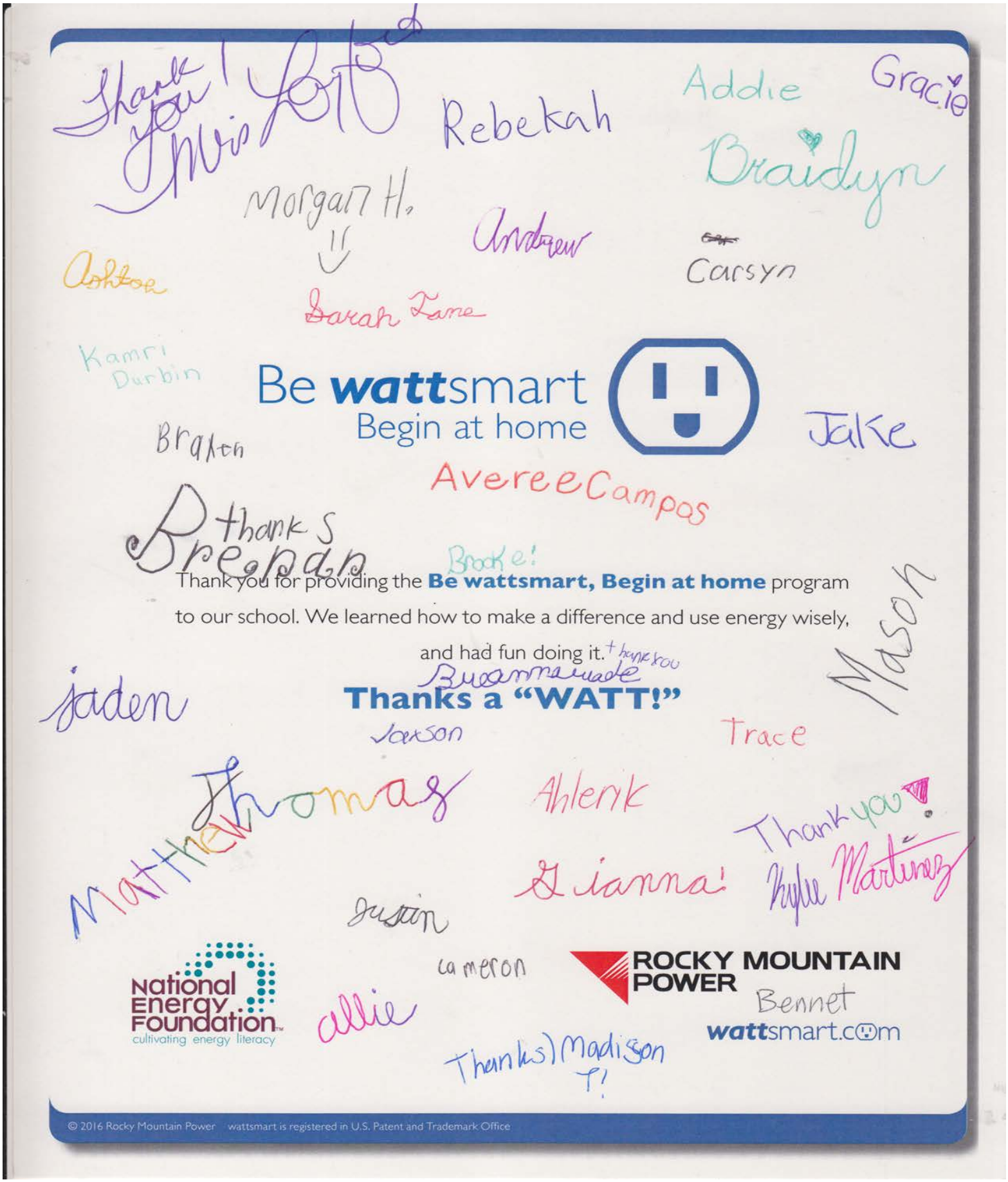


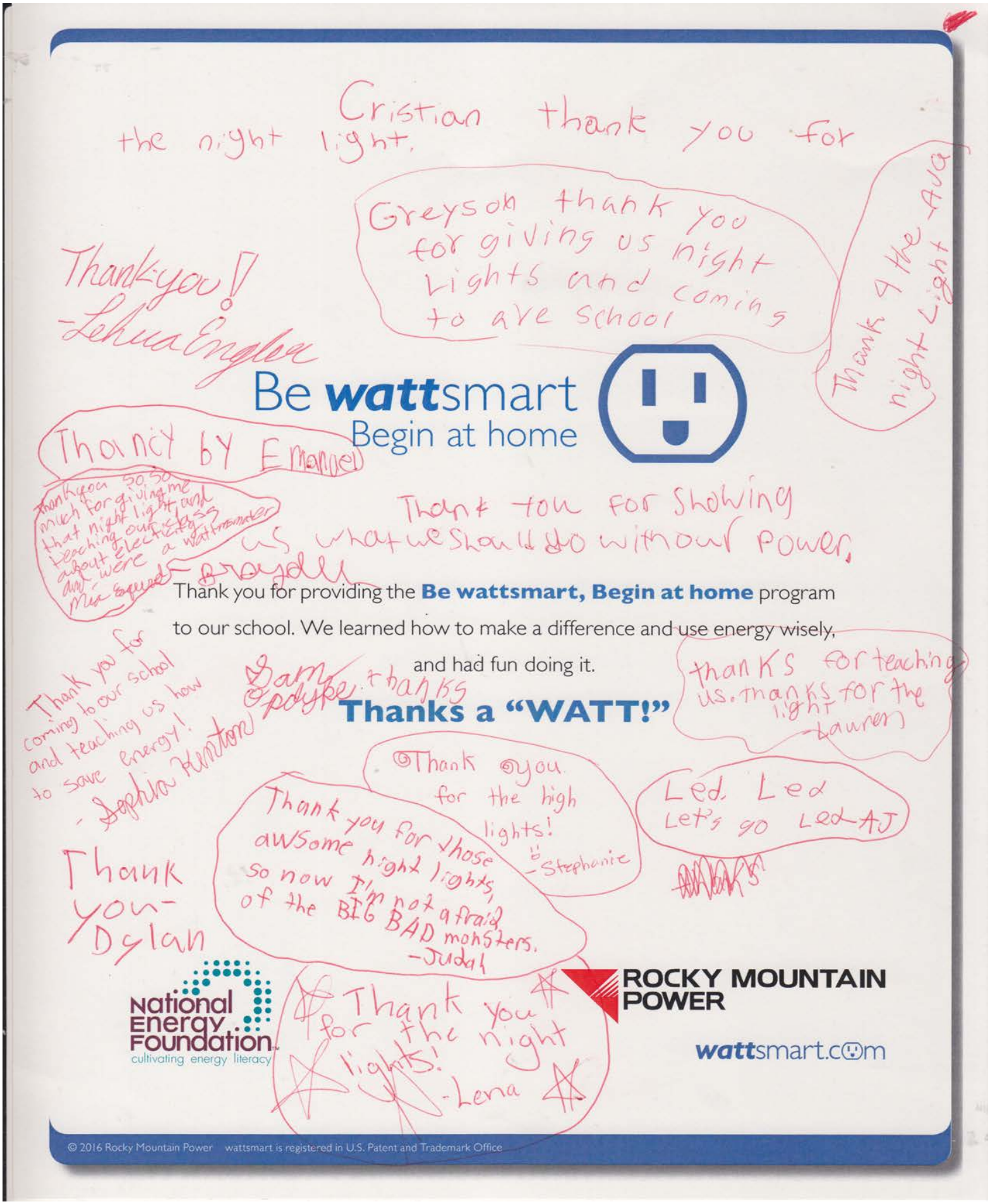
Home Energy Worksheet Summary – Rocky Mountain Power

Energy Efficient Activity	Currently do/ Have done	Will do	Neither
Install and use a programmable thermostat.	79%	10%	11%
Caulk windows and weather strip outside doors.	67%	19%	14%
Inspect attic insulation and add insulation if needed.	59%	18%	23%
Keep furnace air filters clean/replaced regularly.	79%	14%	7%
Replace existing air conditioning unit with a high-efficiency unit.	54%	17%	29%
Close blinds when windows are exposed to the sun.	76%	12%	13%
Use a fan instead of air conditioning.	58%	17%	25%
Participate in Rocky Mountain Power's Cool Keeper program.	17%	25%	57%
Set the water heater temperature to 120 degrees F.	62%	21%	17%
Install a high-efficiency showerhead.	50%	21%	29%
Take five-minute showers.	37%	31%	32%
Wash full loads in the dishwasher and clothes washer.	90%	5%	5%
Replace incandescent bulbs with CFL or LED bulbs.	69%	21%	10%
Turn lights off when not in use.	82%	14%	3%
Replace old, inefficient refrigerators with an ENERGY STAR model.	60%	17%	23%
Unplug old freezers/refrigerators and/or dispose of them in an environmentally safe manner.	59%	16%	25%
Maintain refrigerator and freezer coils and check for door seals twice yearly.	44%	38%	18%
Turn off computers, TVs and game consoles when not in use.	77%	16%	6%
Use a microwave oven, toaster oven, crock pot or outdoor grill instead of a conventional oven.	71%	15%	14%
Visit Rocky Mountain Power at wattsmart.com for more electricity tips and rebates.	18%	60%	22%

Sampling of *Thanks a "WATT" Cards*




Thank you Miss Lori
Rebekah
Addie
Gracie
Braidyn
Morgan H.
Andrew
Ashton
Carsyn
Sarah Jane
Kamri Durbin
Be wattsmart
Begin at home
Jake
Brayton
AvereeCampos
thank S
Brooke!
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. thank you
Mason
jaden
Thanks a "WATT!"
Trace
Thomas
Ahlerik
Thank you
Matthew
Gianna!
Kylie Martinez
Justin
National Energy Foundation
cultivating energy literacy
cameron
ROCKY MOUNTAIN POWER
Bennet
wattsmart.com
allie
Thanks) Madison T!
© 2016 Rocky Mountain Power wattsmart is registered in U.S. Patent and Trademark Office



Maggie

Gisselle

Vanessa "Thanks"

3dvardo

Daniela

Brandon

Be **watt**smart
Begin at home

Daysi

Thanks Teresa

Juan!

Whitney

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.

Cesar

Kianna

Thanks a "WATT!"

Lexi, "Thanks" :)

Thank you so much. you are all so sweet. I learned so much awesome stuff & stuff I didn't know -Evelin

Alexis :)

Ibah :)

Cody

National Energy Foundation
cultivating energy literacy

ROCKY MOUNTAIN POWER

wattsmart.com

Thank you for the night lights! -Lydia

thanks -cooper

Sebastian Bodily

Your Amazing Cedric aka skinny noodle

Dante

Thank you for the night lights! Your AMAZing -Mariah Rodriguez

Thanks for the bulbs and night lights from Connor S.

Be **watt**smart
Begin at home

Samuel

HI Samuel

Gate

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 teaching us about electricity! -Devan Dowling

HI
HI
HI

Thank you for taking your time to teach us about electricity. -Tanish It-P

We loved it and learned a LOT! Thanks for the nightlights! ♡ Mrs. Rocchi

Hector

We loved you teach

We are so grateful! -Sophie Neff

Thank you

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Thank you so much for comeing -Abby

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Exhibit B

Creative and News Stories

wattsmart TV

- Bike Shop/Bright Future
- Eco Flower
- Sweet Savings
- Weber State University
- Crown Burgers
- Loveland Living Planet Aquarium

wattsmart radio

- Smart Power Strips
- Answers from Phil - weatherize/seal air leaks
- Answers from Marty – energy saving answers
- Weber State University energy savings
- Crown Burgers
- Loveland Living Planet Aquarium
- Traffic radio – script

wattsmart Print

- Eco Flower
- Program ad for the Utah Governor's Economic Summit – Eco Flower
- Weber State University case study - color | b/w
- Crown Burgers case study – color | b/w
- Loveland Living Planet Aquarium color | b/w
- Genpak case study
- Smart Businesses become wattsmart Businesses
- Be wattsmart. Keep Utah's economy buzzing.
- Powering Utah
- Thank you ad
- Farm Bureau ad
- Incentives for irrigation projects

wattsmart Outdoor

Your energy options are growing

Digital & Facebook

- Weber State University case study
- Weber State University (animated)
- Weber State University Facebook
- Crown Burgers gallery wrap
- Crown Burgers static
- Crown Burgers Facebook
- Loveland Living Planet Aquarium static
- Loveland Living Planet Aquarium Facebook

Direct mail

- wattsmart Starter Kits
- Home Energy Seasonal Report - May
- Home Energy Seasonal Report - December
- Cool Keeper letter and Cool Keeper brochure
- wattsmart Small Business Direct - Postcard
- Midstream lighting direct mail
- Irrigation letter and application

Email

- wattsmart Starter Kits
- Office/retail eblast
- Help your business. And the planet. eblast
- Seasonal change eblast for business
- Food service webinar
- Grocery & convenience store eblast
- Lighting incentives for business - eblast
- Take control and save energy - eblast

Collateral

- Summer wattsmart handout
- Winter wattsmart handout
- wattsmart Business Brochure
- wattsmart Business Overview
- wattsmart Business Lighting Retrofit process
- wattsmart Business LED instant incentives
- Energy Efficiency Opportunites and wattsmart Business Incentives - Retail / Offices
- Energy Efficiency Opportunities and wattsmart Business Incentives - Grocery / Convenience Stores
- Energy Efficiency Opportunities and wattsmart Business Incentives - Restaurant / Lodging
- Energy Benchmarking

University of Utah sponsorship creative

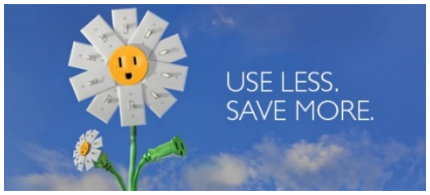
- Football video
- Save your energy for the game – basketball
- Football radio
- Basketball radio

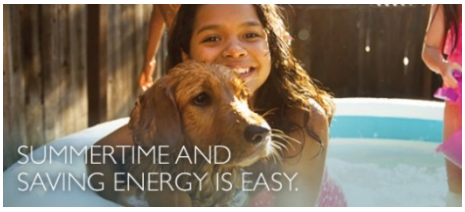
University of Utah LEDs

- Baseline
- Courtside
- Scrolling

Sample Web Features

Imagery on wattsmart.com:





Newsletters/Bill Inserts

Voices Newsletters

- January 2016 – Your day energized
- March 2016 – wattsmart savings spring up at home
- April 2016 – LEDs and more
- July 2016 – Coolest Ways to Save
- September 2016 – Visit the home show to save
- November 2016 – Be wattsmart for winter

wattsup Inserts

- May 2016 wattsup insert – Summertime, savings time
- October 2016 – wattsup insert – energy efficiency and renewable options

Bill Inserts

- Utah Spring Home Show 2016
- Bright Idea for Summit County

Outer Bill Envelope

- January 2016
- April 2016

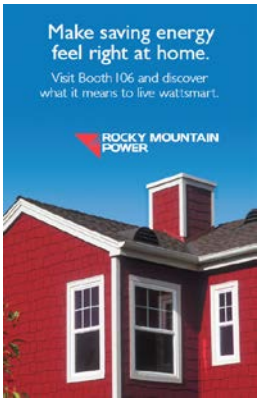
Energy Insights Newsletters

- Winter issue
- Spring issue
- Summer issue
- Fall issue

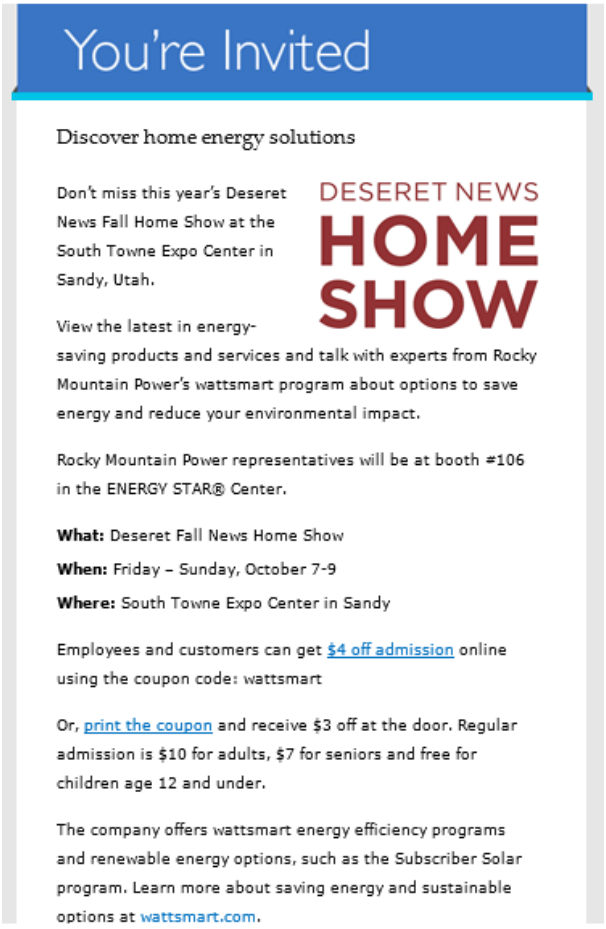
Photos from Spring Home Show

Samples of communications for the Deseret News Home Show – Fall 2016

Digital signs at the show



Email to Rocky Mountain Power employees



You're Invited

Discover home energy solutions

Don't miss this year's Deseret News Fall Home Show at the South Towne Expo Center in Sandy, Utah.

DESERET NEWS HOME SHOW

View the latest in energy-saving products and services and talk with experts from Rocky Mountain Power's wattsmart program about options to save energy and reduce your environmental impact.

Rocky Mountain Power representatives will be at booth #106 in the ENERGY STAR® Center.

What: Deseret Fall News Home Show

When: Friday – Sunday, October 7-9

Where: South Towne Expo Center in Sandy

Employees and customers can get $4 off admission online using the coupon code: wattsmart

Or, print the coupon and receive $3 off at the door. Regular admission is $10 for adults, $7 for seniors and free for children age 12 and under.

The company offers wattsmart energy efficiency programs and renewable energy options, such as the Subscriber Solar program. Learn more about saving energy and sustainable options at wattsmart.com.

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Confidential Appendix 8
Confidential Cost Effectiveness
2016 Utah Peak Reduction

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