

## Appendix 1

## Report Requirements

Item	Specific Requirement	Docket No & Date	Report Reference
1.5	Annual filing date of the Company's	Docket No. 12-035-	The Commission granted the
1	demand-side Annual report be filed by May 1.	116. Order January 15, 2013 p. 2	Company an extension to May 23, 2016. See Docket No. 16-035-17.
2	In the executive summary table, include the estimate of megawatt savings at the time of system peak corresponding to the mega-watt hour savings for energy efficiency programs.	Docket No. 09-035-27. Order December 21, 2009 p. 3	Executive Summary and Planning Process sections.
3	In the executive summary table, include the IRP megawatt and megawatt-hour targets for the year and savings results.	Docket No. 09-035-27. Order December 21, 2009 p. 3	Executive Summary, Table 2. See also item #4.
4	The Company shall report IRP planned Class I and Class II DSM megawatts for Utah. The Company may use the program level DSM megawatt hour forecasts approved in the proceedings addressing the forecast of annual DSM expenditures filed by November 1 pursuant to Docket No. 09-035-T08, order dated August 25, 2009, in place of program level planned IRP megawatt hours when program level DSM megawatt hours are unavailable in the IRP.	Docket No. 13-035-71. Order September 11, 2013 pp 6-7	Executive Summary, Table 2.
5	In the executive summary table, include the lifetime megawatt-hour savings in addition to first year savings.	Docket No. 09-035-27. Order December 21, 2009 p. 3	Executive Summary, page 5 of 46.
6	Provide the calculations for reported savings and identify if reported savings are ex-post or ex-ante estimates.	Docket No. 09-035-27. Order December 21, 2009 p. 3	Due to the complexity of calculating savings for each individual measure and project, calculations are completed in the Company's proprietary software system, DSMC.  For reported savings delineation, see Annual Report page 5 of 46, footnote 2; page 8, footnote 15; and page 22.  See Item 7.
7	Clearly state for each program and measure whether all reported savings are ex-post of ex-ante.	Docket No. 11-035-74. Order July 14, 2011 p. 7	See Item 6.

8	Provide DSM capacity benefits in terms of system coincident peak and for each individual program.	Docket No. 11-035-74. Order February 15, 2012	Executive Summary, Table 2.
9	Include all five cost-effectiveness tests, including portfolio analysis in addition to the program and measure levels.	Docket No. 09-035-27. Order October 7, 2009 p. 14	Appendix 2 Cost Effectiveness.
10	Company shall perform cost effectiveness tests assuming its most recent IRP avoided costs.	Docket No. 09-035-27. Order October 7, 2009 p. 14	Appendix 2 Cost Effectiveness.
11	Accurately and clearly report cost- effectiveness results to avoid confusion.	Docket No. 11-035-74. Order July 14, 2011 p. 8	See Annual Report.
12	Company is required to perform cost effectiveness tests using initial avoided cost assumptions only for new programs or existing programs that incur significant changes.	Docket No. 12-035- 117. Order January 15, 2013 p. 1	Initial avoided cost assumptions were not used because there were no new programs or significant changes to existing programs.
13	Provide cost-effectiveness results with associated decrement values and related inputs such that results regarding the associated year's performance of the Company's peak reduction programs are available in the record, subject to confidentiality requirements of Utah Administrative Code R746-100-16.	Orders issued June 12, 2012 pp. 3-4 in Docket No. 12-035-57, and September 11, 2013 p. 8 in Docket No. 13-035-71	See Confidential Appendix 8.
14	For Irrigation Load Control program, capacity savings should be stated in kilowatts, not megawatts.	Docket No. 12-035-57. Order June 12, 2012 p. 2	Peak Reduction Programs section.
15	Provide irrigation load control program data regarding loads available for curtailment, actual curtailment achieved, and capacity and energy reduction payments in its Utah DSM annual report.	Docket No. 13-035-20. Order March 15, 2013 p. 5	Peak Reduction Programs section and Confidential Appendix 8.
16	The term "reported" includes both expost (verified) energy savings and exante (estimated) energy savings. Include results of ex-post impact evaluations or the schedule for completion of ex-post impact evaluations to be conducted for program year.	Docket No. 09-035-27. Order October 7, 2009 pp. 13-14	Evaluation Section and Appendix 5 Program Evaluations.



# Appendix 2 Utah Cost Effectiveness

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#### **Portfolio and Sector Level Cost Effectiveness**

Navigant estimated the cost-effectiveness for the overall energy efficiency portfolio and component sectors, based on 2015 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall energy efficiency portfolio and the two sector components.

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

Table 1 - Utility Inputs

Table 2 – Portfolio Level Costs 2015

Table 3 – Benefit/Cost Ratios by Portfolio Type

Table 4 – 2015 DSM Portfolio with Load Control Programs Cost-Effectiveness Results

Table 5 - 2015 Total Energy Efficiency Portfolio Cost-Effectiveness Results

Table 6 – 2015 C&I Energy Efficiency Portfolio Cost-Effectiveness Results

Table 7 – 2015 Residential Energy Efficiency Portfolio Cost-Effectiveness Results

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)(base year 2015)	\$0.1105
Commercial Energy Rate (\$/kWh)(base year 2015)	\$0.0840
Industrial Energy Rate (\$/kWh)(base year 2015)	\$0.0591
Irrigation Energy Rate (\$/kWh)(base year 2015)	\$0.0767
Inflation Rate¹	1.9%

<sup>&</sup>lt;sup>1</sup> Future rates determined using a 1.9% annual escalator.

Table 2 - Portfolio Level Costs 2015

Expense	Cost
U of U Ambassador Sponsorship	\$90
Outreach & Communications Wattsmart	\$1,611,024
Technical Reference Library	\$39,668
DSM Central	\$207,870
Total Costs	\$1,858,651

Table 3 – Benefit/Cost Ratios by Portfolio Type

Measure Group	PTRC	TRC	UCT	RIM	PCT
DSM Portfolio with Load Control Programs	1.49	1.36	1.53	0.68	2.80
Total Energy Efficiency Portfolio	1.32	1.20	1.95	0.53	2.57
C&I Programs	1.24	1.13	1.80	0.55	2.24
Residential Programs	1.48	1.34	2.29	0.52	2.94
Load Control Programs	PASS	PASS	PASS	PASS	n/a

Table 4 – 2015 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	\$133,216,850	\$198,815,183	\$65,598,333	1.49
Total Resource Cost Test (TRC) No Adder	n/a	\$133,216,850	\$180,741,076	\$47,524,226	1.36
Utility Cost Test (UCT)	n/a	\$118,371,345	\$180,741,076	\$62,369,730	1.53
Rate Impact Test (RIM)		\$264,857,278	\$180,741,076	-\$84,116,202	0.68
Participant Cost Test (PCT)		\$84,471,078	\$236,386,579	\$151,915,500	2.80
Lifecycle Revenue Impacts (\$/kWh)					n/a

Table 5 - 2015 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	\$0.0600	\$87,864,167	\$116,195,106	\$28,330,939	1.32
Total Resource Cost Test (TRC) No Adder	\$0.0600	\$87,864,167	\$105,631,915	\$17,767,747	1.20
Utility Cost Test (UCT)	\$0.0369	\$54,094,728	\$105,631,915	\$51,537,187	1.95
Rate Impact Test (RIM)		\$200,580,660	\$105,631,915	-\$94,948,745	0.53
Participant Cost Test (PCT)		\$84,471,078	\$217,462,644	\$132,991,565	2.57
Lifecycle Revenue Impacts (\$/kWh)					\$0.0004290742

Table 6 – 2015 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	\$0.0584	\$45,635,201	\$56,565,393	\$10,930,191	1.24
Total Resource Cost Test (TRC) No Adder	\$0.0584	\$45,635,201	\$51,423,084	\$5,787,883	1.13
Utility Cost Test (UCT)	\$0.0366	\$28,584,012	\$51,423,084	\$22,839,072	1.80
Rate Impact Test (RIM)		\$94,067,012	\$51,423,084	-\$42,643,927	0.55
Participant Cost Test (PCT)		\$44,411,615	\$99,545,906	\$55,134,292	2.24
Lifecycle Revenue Impacts (\$/kWh)					\$0.0001578822

Table 7 – 2015 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	\$0.0590	\$40,370,315	\$59,629,714	\$19,259,399	1.48
Total Resource Cost Test (TRC) No Adder	\$0.0590	\$40,370,315	\$54,208,831	\$13,838,516	1.34
Utility Cost Test (UCT)	\$0.0346	\$23,652,064	\$54,208,831	\$30,556,766	2.29
Rate Impact Test (RIM)		\$104,654,997	\$54,208,831	-\$50,446,167	0.52
Participant Cost Test (PCT)		\$40,059,464	\$117,916,737	\$77,857,274	2.94
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002928841

#### **Program Level Cost Effectiveness**

#### **Home Energy Savings**

Navigant estimated the cost-effectiveness results for the Utah Home Energy Savings Program, based on 2015 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.

- Table 1 Home Energy Savings Inputs
- Table 2 Home Energy Savings Annual Program Costs
- Table 3 Home Energy Savings Savings by Measure Category
- Table 4 Benefits/Cost Ratios by Measure Category
- Table 5 Home Energy Savings Program Level Cost-Effectiveness Results
- Table 6 Home Energy Savings Appliance Cost-Effectiveness Results
- Table 7 Home Energy Savings Building Shell Cost-Effectiveness Results
- Table 8 Home Energy Savings Electronics Cost-Effectiveness Results
- Table 9 Home Energy Savings Energy Kits Cost-Effectiveness Results
- Table 10 Home Energy Savings HVAC Cost-Effectiveness Results
- Table 11 Home Energy Savings Lighting Cost-Effectiveness Results
- Table 12 Home Energy Savings Water Heating Cost-Effectiveness Results

**Table 1 - Home Energy Savings Inputs** 

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate (\$/kWh)(base year 2015)	\$0.1105
Inflation Rate¹	1.9%

<sup>&</sup>lt;sup>1</sup> Future rates determined using a 1.9% annual escalator.

Table 2 - Home Energy Savings Annual Program Costs

Measure Group	Engineeri ng Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Total Utility Costs	Gross Customer Costs
Appliances	\$0	\$1,907	\$194,197	\$3,084	\$342,201	\$541,388	\$1,017,143
<b>Building Shell</b>	\$0	\$4,001	\$407,474	\$6,471	\$1,033,853	\$1,451,798	\$5,648,088
Electronics	\$0	\$1,019	\$103,778	\$1,648	\$206,940	\$313,385	\$441,472
Energy Kits	\$0	\$6,837	\$164,003	\$11,057	\$153,291	\$335,187	\$169,118
HVAC	\$0	\$21,750	\$2,215,281	\$35,178	\$3,545,817	\$5,818,027	\$1,807,695
Lighting	\$0	\$188,140	\$513,132	\$304,290	\$8,367,537	\$9,373,098	\$23,986,057
Water Heating	\$0	\$16	\$1,670	\$27	\$3,350	\$5,063	\$6,206
Total	\$0	\$223,669	\$3,599,534	\$361,754	\$13,652,989	\$17,837,946	\$33,075,779

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	774,480	100%	774,480	81%	627,328	15
Building Shell	1,625,054	95%	1,543,801	95%	1,466,611	30
Electronics	413,880	100%	413,880	66%	273,161	5
Energy Kits	2,777,043	100%	2,777,043	78%	2,166,094	9
HVAC	8,834,808	100%	8,834,808	83%	7,332,890	16
Lighting	76,421,125	100%	76,421,125	73%	55,787,421	9
Water Heating	6,660	100%	6,660	100%	6,660	15
Total	90,853,049	100%	90,771,797	75%	67,660,166	10

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Appliances	0.35	0.32	0.60	0.25	1.29
Building Shell	0.39	0.36	1.43	0.49	0.70
Electronics	0.13	0.12	0.16	0.11	0.95
Energy Kits	3.09	2.81	2.63	0.41	14.87
HVAC	5.26	4.78	3.10	1.17	8.35
Lighting	1.48	1.35	2.66	0.44	3.06
Water Heating	0.56	0.51	0.80	0.30	1.88
Total	1.71	1.55	2.59	0.58	2.92

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	\$0.0564	\$29,814,224	\$50,901,453	\$21,087,229	1.71
Total Resource Cost Test (TRC) No Adder	\$0.0564	\$29,814,224	\$46,274,048	\$16,459,824	1.55
Utility Cost Test (UCT)	\$0.0338	\$17,837,946	\$46,274,048	\$28,436,102	2.59
Rate Impact Test (RIM)		\$80,388,767	\$46,274,048	- \$34,114,719	0.58
Participant Cost Test (PCT)		\$33,075,779	\$96,630,341	\$63,554,562	2.92
Lifecycle Revenue Impacts (\$/kWh)				\$	0.0001398118
Discounted Participant Payback (years)					2.65

Tables 6 through 12 provide 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	\$0.1546	\$1,023,073	\$358,345	-\$664,728	0.35
Total Resource Cost Test (TRC) No Adder	\$0.1546	\$1,023,073	\$325,768	-\$697,305	0.32
Utility Cost Test (UCT)	\$0.0818	\$541,388	\$325,768	-\$215,620	0.60
Rate Impact Test (RIM)		\$1,326,165	\$325,768	-\$1,000,398	0.25
Participant Cost Test (PCT)		\$1,017,143	\$1,311,062	\$293,919	1.29
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000027305
Discounted Participant Payback (years)					12.19

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	\$0.2496	\$5,783,628	\$2,280,034	-\$3,503,595	0.39
Total Resource Cost Test (TRC) No Adder	\$0.2496	\$5,783,628	\$2,072,758	-\$3,710,870	0.36
Utility Cost Test (UCT)	\$0.0626	\$1,451,798	\$2,072,758	\$620,960	1.43
Rate Impact Test (RIM)		\$4,211,534	\$2,072,758	-\$2,138,776	0.49
Participant Cost Test (PCT)		\$5,648,088	\$3,938,839	-\$1,709,249	0.70
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000029681
Discounted Participant Payback (years)					n/a

Table 8 - Home Energy Savings Electronics 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	\$0.3342	\$397,817	\$53,655	-\$344,162	0.13
Total Resource Cost Test (TRC) No Adder	\$0.3342	\$397,817	\$48,777	-\$349,040	0.12
Utility Cost Test (UCT)	\$0.2632	\$313,385	\$48,777	-\$264,608	0.16
Rate Impact Test (RIM)		\$454,046	\$48,777	-\$405,269	0.11
Participant Cost Test (PCT)		\$441,472	\$420,063	-\$21,409	0.95
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000033002
Discounted Participant Payback (years)					9.12

Table 9 - Home Energy Savings Energy Kits 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	\$0.0202	\$313,809	\$970,440	\$656,631	3.09
Total Resource Cost Test (TRC) No Adder	\$0.0202	\$313,809	\$882,218	\$568,409	2.81
Utility Cost Test (UCT)	\$0.0215	\$335,187	\$882,218	\$547,030	2.63
Rate Impact Test (RIM)		\$2,176,636	\$882,218	-\$1,294,419	0.41
Participant Cost Test (PCT)		\$169,118	\$2,514,123	\$2,345,005	14.87
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000058495
Discounted Participant Payback (years)					0.06

<sup>\*</sup>Water heating measures utilized the water heating decrement with the water heating load shape.

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	\$0.0467	\$3,772,597	\$19,830,300	\$16,057,704	5.26
Total Resource Cost Test (TRC) No Adder	\$0.0467	\$3,772,597	\$18,027,546	\$14,254,949	4.78
Utility Cost Test (UCT)	\$0.0720	\$5,818,027	\$18,027,546	\$12,209,519	3.10
Rate Impact Test (RIM)		\$15,407,647	\$18,027,546	\$2,619,899	1.17
Participant Cost Test (PCT)		\$1,807,695	\$15,099,577	\$13,291,881	8.35
Lifecycle Revenue Impacts (\$/kWh)					-\$0.0000067152
Discounted Participant Payback (years)					0.02

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	\$0.0462	\$18,515,383	\$27,404,223	\$8,888,841	1.48
Total Resource Cost Test (TRC) No Adder	\$0.0462	\$18,515,383	\$24,912,930	\$6,397,547	1.35
Utility Cost Test (UCT)	\$0.0234	\$9,373,098	\$24,912,930	\$15,539,832	2.66
Rate Impact Test (RIM)		\$56,799,343	\$24,912,930	-\$31,886,413	0.44
Participant Cost Test (PCT)		\$23,986,057	\$73,334,996	\$49,348,938	3.06
Lifecycle Revenue Impacts (\$/kWh)					\$0.0001440950
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	\$0.1127	\$7,919	\$4,457	-\$3,462	0.56
Total Resource Cost Test (TRC) No Adder	\$0.1127	\$7,919	\$4,052	-\$3,867	0.51
Utility Cost Test (UCT)	\$0.0721	\$5,063	\$4,052	-\$1,011	0.80
Rate Impact Test (RIM)		\$13,394	\$4,052	-\$9,343	0.30
Participant Cost Test (PCT)		\$6,206	\$11,682	\$5,476	1.88
Lifecycle Revenue Impacts (\$/kWh)					\$0.000000255
Discounted Participant Payback (years	)				n/a

#### **Refrigerator Recycling**

Navigant estimated the cost-effectiveness results for the Utah Refrigerator Recycling Program (See Ya Later Refrigerator®), based on 2015 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 3 measure categories.

Cost-effectiveness was tested using the 2015 IRP east plug loads 71% and east residential lighting 47% load factor decrements. The program passes the cost-effectiveness for all the tests except the RIM and PCT tests. The memo consists of the following tables.

Table 1 - SYLR Inputs

Table 2 – SYLR Annual Program Costs

Table 3 – SYLR Savings by Measure Category

Table 4 – Benefit/Cost Ratios by Measure Category

Table 5 – SYLR Program Level Cost-Effectiveness Results

Table 6 – SYLR Energy Savings Kits Cost-Effectiveness Results

Table 7 – SYLR Freezer Recycling Cost-Effectiveness Results

Table 8 – SYLR Refrigerator Recycling Cost-Effectiveness Results

Table 1 - SYLR Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate (\$/kWh)(base year 2015)	\$0.1105
Inflation Rate¹	1.9%

<sup>&</sup>lt;sup>1</sup> Future rates determined using a 1.9% annual escalator.

Table 2 - SYLR Annual Program Costs

Measure Group	Engineering Costs	Utility Admin	Admin	Program Dev.	Incentives	Total Utility Costs	Gross Customer Costs
Energy Savings Kit	\$0	\$2,978	\$24,308	\$857	\$61,660	\$89,802	\$0
Freezer Recycling	\$0	\$14,471	\$118,143	\$4,167	\$67,600	\$204,381	\$0
Refrigerator Recycling	\$0	\$79,477	\$648,837	\$22,883	\$286,010	\$1,037,206	\$0
Total	<b>\$0</b>	\$96,925	\$791,287	\$27,906	\$415,270	\$1,331,389	\$0

Table 3 - SYLR Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Energy Savings Kit	461,452	100%	461,452	42%	193,810	6
Freezer Recycling	2,242,765	100%	2,242,765	40%	897,106	5
Refrigerator Recycling	12,317,220	100%	12,317,220	100%	12,317,220	7
Total	15,021,437	100%	15,021,437	89%	13,408,136	7

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC TRC	UCT R	RIM PCT
Energy Savings Kit	0.74 0.67	0.67 0	.29 n/a
Freezer Recycling	0.86 0.78	0.78 0	.24 n/a
Refrigerator Recycling	3.26 2.96	2.96 0	.32 n/a
Total	2.72 2.47	2.47 0	.32 n/a

Table 5 - SYLR Program Level Cost-Effectiveness Results

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0173	\$1,331,389	\$3,620,004	\$2,288,616	2.72
Total Resource Cost Test (TRC) No Adder	\$0.0173	\$1,331,389	\$3,290,913	\$1,959,524	2.47
Utility Cost Test (UCT)	\$0.0173	\$1,331,389	\$3,290,913	\$1,959,524	2.47
Rate Impact Test (RIM)		\$10,411,589	\$3,290,913	-\$7,120,676	0.32
Participant Cost Test (PCT)		\$0	\$10,350,208	\$10,350,208	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000413418

Tables 6 through 8 provide cost-effectiveness results for all 3 measures.

Table 6 - SYLR Energy Savings Kits 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	\$0.0906	\$89,802	\$66,236	-\$23,566	0.74
Total Resource Cost Test (TRC) No Adder	\$0.0906	\$89,802	\$60,215	-\$29,587	0.67
Utility Cost Test (UCT)	\$0.0906	\$89,802	\$60,215	-\$29,587	0.67
Rate Impact Test (RIM)		\$206,972	\$60,215	-\$146,757	0.29
Participant Cost Test (PCT)		\$0	\$340,634	\$340,634	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.000009943
Discounted Participant Payback (years)					0.13

Table 7 - SYLR Freezer Recycling Cost-Effectiveness Results (Decrement - East Plug Loads - 71%, Load Shape - Plug Loads)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0523	\$204,381	\$176,211	-\$28,169	0.86
Total Resource Cost Test (TRC) No Adder	\$0.0523	\$204,381	\$160,192	-\$44,188	0.78
Utility Cost Test (UCT)	\$0.0523	\$204,381	\$160,192	-\$44,188	0.78
Rate Impact Test (RIM)		\$666,336	\$160,192	-\$506,144	0.24
Participant Cost Test (PCT)		\$0	\$1,222,489	\$1,222,489	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000041216
Discounted Participant Payback (years)					n/a

Table 8 - SYLR Refrigerator Recycling Cost-Effectiveness Results (Decrement - East Plug Loads - 71%, Load Shape - Plug Loads)

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0144	\$1,037,206	\$3,377,557	\$2,340,351	3.26
Total Resource Cost Test (TRC) No Adder	\$0.0144	\$1,037,206	\$3,070,506	\$2,033,300	2.96
Utility Cost Test (UCT)	\$0.0144	\$1,037,206	\$3,070,506	\$2,033,300	2.96
Rate Impact Test (RIM)		\$9,538,281	\$3,070,506	-\$6,467,775	0.32
Participant Cost Test (PCT)		\$0	\$8,787,085	\$8,787,085	n/a
Lifecycle Revenue Impacts (\$/kWh)				\$	0.0000375511
Discounted Participant Payback (years)					n/a

#### **New Homes**

Navigant estimated the cost-effectiveness results for the Utah New Homes Program, based on 2015 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program.

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

Table 1 – New Homes Program Inputs

Table 2 – New Homes Annual Program Costs

Table 3 – New Homes Savings by Measure Category

Table 4 – New Homes Program Level Cost-Effectiveness Results

Table 1 - New Homes Program Inputs

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate (\$/kWh)(base year 2015)	\$0.1105
Inflation Rate¹	1.9%

<sup>&</sup>lt;sup>1</sup> 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	\$48,689	\$757,590	\$179,874	\$844,976	\$1,831,129	\$6,983,685
Total	<b>\$0</b>	\$48,689	\$757,590	\$179,874	\$844,976	\$1,831,129	\$6,983,685

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	2,908,612	100%	2,908,612	80%	2,326,890	14
Total	2,908,612	100%	2,908,612	80%	2,326,890	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	\$0.2810	\$6,573,101	\$1,636,851	-\$4,936,250	0.25
Total Resource Cost Test (TRC) No Adder	\$0.2810	\$6,573,101	\$1,488,046	-\$5,085,055	0.23
Utility Cost Test (UCT)	\$0.0783	\$1,831,129	\$1,488,046	-\$343,083	0.81
Rate Impact Test (RIM)		\$4,603,760	\$1,488,046	-\$3,115,713	0.32
Participant Cost Test (PCT)		\$6,983,685	\$4,310,764	-\$2,672,921	0.62
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000090972
Discounted Participant Payback (years)					n/a

#### **Home Energy Reports**

Navigant estimated the cost-effectiveness results for the Utah Home Energy Reporting Program, based on 2015 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program.

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

Table 1 – Home Energy Reporting Inputs

Table 2 – Home Energy Reporting Annual Program Costs

Table 3 – Home Energy Reporting Savings by Measure Category

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

**Table 1 - Home Energy Reporting Inputs** 

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate (\$/kWh)(base year 2015)	\$0.1105
Inflation Rate <sup>1</sup>	1.9%

<sup>&</sup>lt;sup>1</sup> 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
Home Energy Reports	\$0	\$57,584	\$2,507,560	\$26,400	\$0	\$2,591,545	\$0
Total	\$0	\$57,584	\$2,507,560	\$26,400	<b>\$</b> 0	\$2,591,545	\$0

Table 3 – Home Energy Reporting Savings by Measure Category

Measure Group	Gross kWh Savings	Realization Rate	Adjusted Gross kWh Savings	Net to Gross Ratio	Net kWh Savings	Measure Life
Home Energy Reports	56,615,083	100%	56,615,083	100%	56,615,083	1
Total	56,615,083	100%	56,615,083	100%	56,615,083	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	\$0.0480	\$2,591,545	\$3,339,876	\$748,332	1.29
Total Resource Cost Test (TRC) No Adder	\$0.0480	\$2,591,545	\$3,036,251	\$444,707	1.17
Utility Cost Test (UCT)	\$0.0480	\$2,591,545	\$3,036,251	\$444,707	1.17
Rate Impact Test (RIM)		\$8,966,375	\$3,036,251	-\$5,930,123	0.34
Participant Cost Test (PCT)		\$0	\$6,374,830	\$6,374,830	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002432126
Discounted Participant Payback (years)					n/a

#### Low Income

Navigant estimated the cost-effectiveness results for the Utah Low Income Weatherization Program, based on 2015 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.

Table 1 - Low Income Weatherization Inputs

Table 2 - Low Income Weatherization Annual Program Costs

Table 3 - Low Income Weatherization Savings by Measure Category

Table 4 - Low Income Weatherization Program Level Cost-Effectiveness Results

**Table 1 - Low Income Weatherization Inputs** 

Parameter	Value
Discount Rate	6.66%
Residential Line Loss	9.32%
Residential Energy Rate (\$/kWh)(base year 2015)	\$0.1105
Inflation Rate <sup>1</sup>	1.9%

<sup>&</sup>lt;sup>1</sup> 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	\$15,713	\$2,382	\$15,818	\$26,143	\$60,056	\$0
Total	\$0	\$15,713	\$2,382	\$15,818	\$26,143	\$60,056	\$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	225,327	100%	225,327	100%	225,327	11
Total	225,327	100%	225,327	100%	225,327	11

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	\$0.0317	\$60,056	\$131,528	\$71,472	2.19
Total Resource Cost Test (TRC) No Adder	\$0.0317	\$60,056	\$119,571	\$59,515	1.99
Utility Cost Test (UCT)	\$0.0317	\$60,056	\$119,571	\$59,515	1.99
Rate Impact Test (RIM)		\$284,507	\$119,571	-\$164,936	0.42
Participant Cost Test (PCT)		\$0	\$250,594	\$250,594	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.000006106
Discounted Participant Payback (years)					n/a

#### **Non-Residential Energy Efficiency**

Navigant estimated the cost-effectiveness results for the Utah Wattsmart Business Program, based on 2015 costs and savings estimates provided by PacifiCorp. This memo provides the cost-effectiveness results for the overall program and for the 13 measure categories.

Cost-effectiveness was tested using the 2015 IRP east 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.

- Table 1 Utility Inputs
- Table 2 Annual Wattsmart Business Program Costs by Measure Category
- Table 3 Annual Wattsmart Business Program Savings by Measure Category
- Table 4 Benefit/Cost Ratios by Measure Category
- Table 5 Wattsmart Business Program Level Cost-Effectiveness Results
- Table 6 Wattsmart Business Additional Measures Cost-Effectiveness Results
- Table 7 Wattsmart Business Building Shell Cost-Effectiveness Results
- Table 8 Wattsmart Business Compressed Air Cost-Effectiveness Results
- Table 9 Wattsmart Business Energy Management Cost-Effectiveness Results
- Table 10 Wattsmart Business Electronics Cost-Effectiveness Results
- Table 11 Wattsmart Business Energy Project Manager Co-Funding Cost-Effectiveness Results
- Table 12 Wattsmart Business Farm and Dairy Cost-Effectiveness Results
- Table 13 Wattsmart Business Food Service Equipment Cost-Effectiveness Results
- Table 14 Wattsmart Business HVAC Cost-Effectiveness Results
- Table 15 Wattsmart Business Irrigation Cost-Effectiveness Results
- Table 16 Wattsmart Business Lighting Cost-Effectiveness Results
- Table 17 Wattsmart Business Motors Cost-Effectiveness Results
- Table 18 Wattsmart Business Refrigeration Cost-Effectiveness Results

Table 1 - Utility Inputs

Parameter	Value
Discount Rate	6.66%
Commercial Line Loss	8.71%
Industrial Line Loss	5.85%
Irrigation Line Loss	9.24%
Commercial Energy Rate (\$/kWh)(base year 2015)	8.40%
Industrial Energy Rate (\$/kWh)(base year 2015)	\$0.0591
Irrigation Energy Rate (\$/kWh)(base year 2015)	\$0.0767
Inflation Rate <sup>1</sup>	1.9%

<sup>&</sup>lt;sup>1</sup> Future rates determined using a 1.9% annual escalator.

Table 2 – Annual Wattsmart Business Program Costs by Measure Category

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Measure Group	Engineering Costs	Utility Admin	Program Delivery	Program Dev.	Incentives	Bill Credits	Total Utility Costs	Gross Customer Costs
Additional Measures	\$57,080	\$14,001	\$67,133	\$14,220	\$274,407	\$0	\$426,841	\$823,449
Building Shell	\$44,318	\$10,870	\$52,124	\$11,041	\$539,982	\$0	\$658,336	\$1,276,034
Compressed Air	\$181,103	\$44,421	\$213,000	\$45,116	\$555,839	\$333,810	\$1,373,289	\$1,735,081
Energy Management	\$414,573	\$101,686	\$487,589	\$103,278	\$287,296	\$0	\$1,394,422	\$242,431
Electronics	\$7,689	\$1,886	\$9,044	\$1,916	\$21,040	\$0	\$41,575	\$39,332
Energy Project Manager Co- funding	\$0	\$0	\$0	\$0	\$411,587	\$0	\$411,587	\$0
Farm & Dairy	\$10,204	\$2,503	\$12,001	\$2,542	\$22,506	\$0	\$49,756	\$38,478
Food Service Equipment	\$154,743	\$37,955	\$181,997	\$38,549	\$480,763	\$0	\$894,007	\$1,355,783
HVAC	\$332,888	\$81,651	\$391,518	\$82,929	\$1,455,778	\$301,434	\$2,646,198	\$5,808,832
Irrigation	\$0	\$17,881	\$85,738	\$18,160	\$297,356	\$0	\$419,135	\$792,073
Lighting	\$1,929,466	\$473,259	\$2,269,292	\$480,668	\$12,103,592	\$1,137,452	\$18,393,728	\$29,445,681
Motors	\$105,044	\$25,765	\$123,544	\$26,168	\$328,892	\$129,112	\$738,525	\$954,946
Refrigeration	\$163,860	\$40,192	\$192,720	\$40,821	\$699,021	\$0	\$1,136,614	\$1,899,495
Total	\$3,400,968	\$852,069	\$4,085,699	\$865,409	\$17,478,059	\$1,901,809	\$28,584,012	\$44,411,615

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	1,977,803	92%	1,819,579	81%	1,473,859	14
Building Shell	1,535,617	92%	1,412,768	81%	1,144,342	14
Compressed Air	6,275,158	92%	5,773,145	81%	4,676,248	14
Energy Management	14,364,804	100%	14,364,804	100%	14,364,804	3
Electronics	266,433	92%	245,118	81%	198,546	8
Energy Project Manager Co- funding	0	0%	0	0%	0	0
Farm & Dairy	353,567	92%	325,282	81%	263,478	14
Food Service Equipment	5,361,788	92%	4,932,845	81%	3,995,604	6
HVAC	11,534,467	92%	10,611,710	81%	8,595,485	14
Irrigation	2,525,907	92%	2,323,834	81%	1,882,306	9
Lighting	66,855,345	92%	61,506,918	81%	49,820,603	13
Motors	3,639,724	92%	3,348,546	81%	2,712,322	13
Refrigeration	5,677,699	92%	5,223,483	81%	4,231,021	15
Total	120,368,312	93%	111,888,032	83%	93,358,618	12

Table 4 - Benefit/Cost Ratios by Measure Category

Measure Group	PTRC	TRC	UCT	RIM	PCT
Additional Measures	1.23	1.11	2.14	0.59	2.01
Building Shell	0.71	0.65	1.13	0.44	1.41
Compressed Air	1.67	1.52	2.09	0.65	2.70
Energy Management	1.77	1.61	1.56	0.51	13.09
Electronics	1.20	1.09	1.37	0.36	4.18
Energy Project Manager Co-funding	0.00	0.00	0.00	0.00	0.00
Farm & Dairy	3.11	2.83	3.32	0.60	7.79
Food Service Equipment	0.84	0.76	1.29	0.42	2.03
HVAC	1.69	1.54	3.25	0.85	1.90
Irrigation	2.20	2.00	3.65	0.99	2.13
Lighting	1.09	0.99	1.57	0.48	2.18
Motors	1.64	1.49	2.13	0.61	2.84
Refrigeration	1.58	1.44	2.50	0.61	2.68
Total	1.24	1.13	1.80	0.55	2.24

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	\$0.0584	\$45,635,201	\$56,565,393	\$10,930,191	1.24
Total Resource Cost Test (TRC) No Adder	\$0.0584	\$45,635,201	\$51,423,084	\$5,787,883	1.13
Utility Cost Test (UCT)	\$0.0366	\$28,584,012	\$51,423,084	\$22,839,072	1.80
Rate Impact Test (RIM)		\$94,067,012	\$51,423,084	-\$42,643,927	0.55
Participant Cost Test (PCT)		\$44,411,615	\$99,545,906	\$55,134,292	2.24
Lifecycle Revenue Impacts (\$/kWh)					\$0.0001578822

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

Table 6 - Wattsmart Business Additional Measures Cost-Effectiveness Results (Decrement - West 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	\$0.0553	\$819,427	\$1,004,822	\$185,394	1.23
Total Resource Cost Test (TRC) No Adder	\$0.0553	\$819,427	\$913,474	\$94,047	1.11
Utility Cost Test (UCT)	\$0.0288	\$426,841	\$913,474	\$486,634	2.14
Rate Impact Test (RIM)		\$1,547,641	\$913,474	-\$634,166	0.59
Participant Cost Test (PCT)		\$823,449	\$1,658,111	\$834,662	2.01
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000018516
Discounted Participant Payback (years)					5.78

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	\$0.1001	\$1,151,941	\$818,054	-\$333,887	0.71
Total Resource Cost Test (TRC) No Adder	\$0.1001	\$1,151,941	\$743,685	-\$408,256	0.65
Utility Cost Test (UCT)	\$0.0572	\$658,336	\$743,685	\$85,350	1.13
Rate Impact Test (RIM)		\$1,678,687	\$743,685	-\$935,002	0.44
Participant Cost Test (PCT)		\$1,276,034	\$1,799,676	\$523,642	1.41
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000027300
Discounted Participant Payback (years)					9.14

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	\$0.0402	\$1,889,056	\$3,155,275	\$1,266,219	1.67
Total Resource Cost Test (TRC) No Adder	\$0.0402	\$1,889,056	\$2,868,432	\$979,376	1.52
Utility Cost Test (UCT)	\$0.0292	\$1,373,289	\$2,868,432	\$1,495,142	2.09
Rate Impact Test (RIM)		\$4,446,284	\$2,868,432	-\$1,577,853	0.65
Participant Cost Test (PCT)		\$1,735,081	\$4,683,470	\$2,948,389	2.70
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000046070
Discounted Participant Payback (years	)				3.05

Table 9 - 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	\$0.0343	\$1,349,557	\$2,392,241	\$1,042,684	1.77
Total Resource Cost Test (TRC) No Adder	\$0.0343	\$1,349,557	\$2,174,764	\$825,207	1.61
Utility Cost Test (UCT)	\$0.0355	\$1,394,422	\$2,174,764	\$780,342	1.56
Rate Impact Test (RIM)		\$4,281,306	\$2,174,764	-\$2,106,542	0.51
Participant Cost Test (PCT)		\$242,431	\$3,174,180	\$2,931,749	13.09
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000285111
Discounted Participant Payback (years)					n/a

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

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.0404	\$52,393	\$62,823	\$10,429	1.20
Total Resource Cost Test (TRC) No Adder	\$0.0404	\$52,393	\$57,112	\$4,718	1.09
Utility Cost Test (UCT)	\$0.0321	\$41,575	\$57,112	\$15,537	1.37
Rate Impact Test (RIM)		\$157,766	\$57,112	-\$100,654	0.36
Participant Cost Test (PCT)		\$39,332	\$164,486	\$125,154	4.18
Lifecycle Revenue Impacts (\$/kWh)					\$0.000005115
Discounted Participant Payback (years)					1.08

Table 11 - Wattsmart Business Energy Project Manager 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	\$411,587	\$0	-\$411,587	0.00
Total Resource Cost Test (TRC) No Adder	n/a	\$411,587	\$0	-\$411,587	0.00
Utility Cost Test (UCT)	n/a	\$411,587	\$0	-\$411,587	0.00
Rate Impact Test (RIM)		\$411,587	\$0	-\$411,587	0.00
Participant Cost Test (PCT)		\$0	\$411,587	\$411,587	n/a
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000168804
Discounted Participant Payback (years)					n/a

Table 12 - 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	\$0.0221	\$58,417	\$181,771	\$123,353	3.11
Total Resource Cost Test (TRC) No Adder	\$0.0221	\$58,417	\$165,246	\$106,829	2.83
Utility Cost Test (UCT)	\$0.0188	\$49,756	\$165,246	\$115,490	3.32
Rate Impact Test (RIM)		\$274,279	\$165,246	-\$109,033	0.60
Participant Cost Test (PCT)		\$38,478	\$299,695	\$261,217	7.79
Lifecycle Revenue Impacts (\$/kWh)					\$0.000003184
Discounted Participant Payback (years)					0.75

Table 13 - Wattsmart Business Food Service Equipment 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	\$0.0740	\$1,511,429	\$1,268,097	-\$243,332	0.84
Total Resource Cost Test (TRC) No Adder	\$0.0740	\$1,511,429	\$1,152,815	-\$358,614	0.76
Utility Cost Test (UCT)	\$0.0437	\$894,007	\$1,152,815	\$258,808	1.29
Rate Impact Test (RIM)		\$2,730,283	\$1,152,815	-\$1,577,468	0.42
Participant Cost Test (PCT)		\$1,355,783	\$2,747,770	\$1,391,987	2.03
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000106871
Discounted Participant Payback (years)					2.66

Table 14 - 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	\$0.0656	\$5,594,140	\$9,455,812	\$3,861,672	1.69
Total Resource Cost Test (TRC) No Adder	\$0.0656	\$5,594,140	\$8,596,193	\$3,002,053	1.54
Utility Cost Test (UCT)	\$0.0310	\$2,646,198	\$8,596,193	\$5,949,995	3.25
Rate Impact Test (RIM)		\$10,141,430	\$8,596,193	-\$1,545,237	0.85
Participant Cost Test (PCT)		\$5,808,832	\$11,010,585	\$5,201,753	1.90
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000045118
Discounted Participant Payback (years	s)				6.37

<sup>\*</sup>HVAC motor measures utilized the Industrial decrement and HVAC load shape.

Table 15 - 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	\$0.0564	\$763,357	\$1,682,231	\$918,873	2.20
Total Resource Cost Test (TRC) No Adder	\$0.0564	\$763,357	\$1,529,301	\$765,943	2.00
Utility Cost Test (UCT)	\$0.0310	\$419,135	\$1,529,301	\$1,110,166	3.65
Rate Impact Test (RIM)		\$1,546,424	\$1,529,301	-\$17,124	0.99
Participant Cost Test (PCT)		\$792,073	\$1,689,072	\$896,999	2.13
Lifecycle Revenue Impacts (\$/kWh)					\$0.000000774
Discounted Participant Payback (years)					3.51

Table 16 - 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	\$0.0611	\$29,003,686	\$31,687,784	\$2,684,099	1.09
Total Resource Cost Test (TRC) No Adder	\$0.0611	\$29,003,686	\$28,807,077	-\$196,609	0.99
Utility Cost Test (UCT)	\$0.0387	\$18,393,728	\$28,807,077	\$10,413,349	1.57
Rate Impact Test (RIM)		\$59,593,179	\$28,807,077	-\$30,786,102	0.48
Participant Cost Test (PCT)		\$29,445,681	\$64,104,563	\$34,658,882	2.18
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000966801
Discounted Participant Payback (years)					4.25

Table 17 - 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	\$0.0408	\$1,054,027	\$1,732,781	\$678,754	1.64
Total Resource Cost Test (TRC) No Adder	\$0.0408	\$1,054,027	\$1,575,256	\$521,228	1.49
Utility Cost Test (UCT)	\$0.0286	\$738,525	\$1,575,256	\$836,730	2.13
Rate Impact Test (RIM)		\$2,564,992	\$1,575,256	-\$989,736	0.61
Participant Cost Test (PCT)		\$954,946	\$2,712,901	\$1,757,955	2.84
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000031081
Discounted Participant Payback (years)					2.85

Table 18 - 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	\$0.0443	\$1,976,183	\$3,123,702	\$1,147,519	1.58
Total Resource Cost Test (TRC) No Adder	\$0.0443	\$1,976,183	\$2,839,729	\$863,546	1.44
Utility Cost Test (UCT)	\$0.0255	\$1,136,614	\$2,839,729	\$1,703,116	2.50
Rate Impact Test (RIM)		\$4,693,153	\$2,839,729	-\$1,853,424	0.61
Participant Cost Test (PCT)		\$1,899,495	\$5,089,811	\$3,190,316	2.68
Lifecycle Revenue Impacts (\$/kWh)					\$0.0000050588
Discounted Participant Payback (years)					4.02



# 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.

#### **Refrigerator Recycling**

The Company hired independent inspectors to phone survey >= 5 percent program participants and to site inspect >= 5 percent of program participants. The survey's verify program participation, eligibility of equipment, that vendor pick-up procedures were followed (equipment is disabled at site, kits distributed, etc.) and to survey customer experience.

#### **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

#### wattsmart 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.



## Appendix 4

Home Energy Savings Retailers and Trade Allies

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## **Upstream Retailers**

Retailer	City	CFLs	LEDs	RACs	APS
Ace Hardware - Hurst #5738	Cedar City	V	$\sqrt{}$		
Ace Hardware - Jones	Castle Dale	<b>V</b>	√		
Ace Hardware - Olympus Hills	Salt Lake City	√	√		
Ace Hardware - Rasmussen #3961	Gunnison	V	$\sqrt{}$		
Ace Hardware - Salt Lake City	Salt Lake City	<b>V</b>	√		
Ace Hardware - Smith & Edwards	Ogden	√	√		
Ace Hardware - Tremonton #14654	Tremonton	√	√		
Ace Hardware - Turner Lumber #4097	Moab	√	√		
Ace Hardware - Wangsgards	Ogden	√	√		
Ace Hardware - Wyndom Square	Layton	√	√		
Ace Hardware #14886	Highland	√	√		
Ace Hardware #9314	Pleasant Grove	V	√		
Ace Hardware Clearfield #15411	Clearfield	<b>V</b>	<b>√</b>		
Ace Hardware Delta #4954	Delta	<b>V</b>	<b>√</b>		
Ace Hardware of Kamas	Kamas	V	<b>√</b>		
Barrett's Foodtown	Salina	V	$\sqrt{}$		
Batteries Plus #356	Layton	V	$\sqrt{}$		
Batteries Plus #358	Salt Lake City	V	<b>√</b>		
Batteries Plus #359	Sandy	V	<b>√</b>		
Batteries Plus #754	West Jordan	V	<b>√</b>		
Batteries Plus #802	Riverdale	V	$\sqrt{}$		
Big Lots #4091	Kearns	V	<b>√</b>		
Big Lots #4095	Salt Lake City	<b>V</b>	√		
Big Lots #4108	South Ogden	<b>V</b>	√		
Big Lots #4485	West Jordan	<b>V</b>	√		
Big Lots #4536	Cedar City	<b>V</b>	<b>√</b>		
Big Lots #4583	Salt Lake City	V	<b>√</b>		
Big Lots #4605	Layton	V	$\sqrt{}$		
Costco #1019	South Jordan	V	$\sqrt{}$	V	
Costco #113	Salt Lake City	V	<b>√</b>	V	
Costco #487	Sandy	V	$\sqrt{}$	V	
Costco #622	West Valley City	<b>V</b>	√	<b>V</b>	
Costco #764	Murray	<b>V</b>	√	<b>V</b>	
Costco #770	Ogden	<b>V</b>	√	V	
Delta Jubilee Foods	Delta	<b>V</b>	√		
Do it Best - Greer's	Tremonton	V	√		
Do It Best - Jenson Lumbus	Draper	V	<b>V</b>		
Do It Best - Marshall's Hardware	Salt Lake City	√	<b>V</b>		
Dollar Tree #2601	Sandy	√			√
Dollar Tree #2605	Orem	√			√
Dollar Tree #2608	Salt Lake City	√			√
Dollar Tree #2609	Taylorsville	V			<b>V</b>
Dollar Tree #2612	Ogden	√			√

Retailer	City	CFLs	LEDs	RACs	APS
Dollar Tree #2630	Draper	<b>V</b>			V
Dollar Tree #2642	Magna	<b>V</b>			V
Dollar Tree #2646	Salt Lake City	V			V
Dollar Tree #2652	Salt Lake City	V			V
Dollar Tree #2659	South Jordan	V			V
Dollar Tree #2665	Cedar City	<b>V</b>			V
Dollar Tree #2669	Clinton	<b>V</b>			V
Dollar Tree #2670	Salt Lake City	V			V
Dollar Tree #2678	Tooele	<b>V</b>			V
Dollar Tree #2815	West Valley City	<b>V</b>			V
Dollar Tree #3693	Ogden	<b>V</b>			V
Dollar Tree #3696	West Jordan	V			V
Dollar Tree #3779	Riverdale	V			V
Dollar Tree #3869	Syracuse	V			V
Dollar Tree #4927	Salt Lake City	<b>V</b>			V
Dollar Tree #4979	South Jordan	<b>V</b>			V
Dollar Tree #5018	Ogden	V			V
Dollar Tree #5036	Lindon	<b>V</b>			V
Family Dollar #10148	Cedar City		V		
Family Dollar #5136	Ogden		V		
Family Dollar #5137	Ogden		V		
Family Dollar #5143	Salt Lake City		V		
Family Dollar #5170	Clearfield		V		
Family Dollar #5256	Salt Lake City		V		
Family Dollar #5465	Cedar City		V		
Family Dollar #5566	Salt Lake City		√		
Family Dollar #5624	Moab		V		
Family Dollar #5631	West Valley City		√		
Family Dollar #5704	West Valley City		√		
Family Dollar #5761	Taylorsville		√		
Family Dollar #5816	West Valley City		√		
Family Dollar #5832	Ogden		√		
Family Dollar #5853	Tremonton		√		
Family Dollar #5871	West Valley City		√		
Family Dollar #5979	Roy		√		
Family Dollar #6141	Ogden		V		
Family Dollar #6166	Salt Lake City		V		
Family Dollar #6223	West Valley City		√		
Family Dollar #6224	Tooele		V		
Family Dollar #6282	Magna		√		
Family Dollar #6287	Orem		√		
Family Dollar #6292	West Jordan		√		
Family Dollar #6365	Pleasant Grove		√		
Family Dollar #6628	Delta		V		
Family Dollar #6999	Castle Dale		√		
Family Dollar #7301	Grantsville		√		
Family Dollar #7399	Salt Lake City		V		

Retailer	City	CFLs	LEDs	RACs	APS
Family Dollar #8251	Kamas				
Family Dollar #8729	Midvale		<b>√</b>		
Family Dollar #8783	Salt Lake City		<b>√</b>		
Family Dollar #9401	Salt Lake City		<b>√</b>		
Fresh Markets #2307	Jeremy Ranch	V			
Fresh Markets #2350	Salt Lake City	V			
Fresh Markets #2356	Ogden	√ √			
Fresh Markets #2365	Park City	√ √			
Fresh Markets #2367	Taylorsville	√ √			
Fresh Markets #2371	Salt Lake City	√ √			
Fresh Markets #2372	Salt Lake City	√ √			
Fresh Markets #2379	Draper	√ √			
Fresh Markets #2381	West Valley City	√ √			
Fresh Markets #2382	Ogden	√ √			
Fresh Markets #2391	Sandy	√ √			
Griffith Foodtown	Coalville	· √	<b>√</b>		
Gunnison Market #2	Gunnison	√ √	V		
Habitat for Humanity Park City	Park City	· √	,		
Habitat for Humanity Park Oity	Salt Lake City	<b>√</b>			
Harmons #1	West Valley City	1	<b>√</b>		
Harmons #14	Draper Draper	<b>√</b>	<b>√</b>		
Harmons #16	Draper	۷	√ √		
Harmons #2	Midvale	1	<b>√</b>		
Harmons #21		1	<b>√</b>		
Harmons #24	Salt Lake City	1	√ √		
	Salt Lake City	1	√ √		
Harmons #33 Harmons #5	Kearns	1	√ √		
	Ogden	√ √	√ √		
Harmons #86	South Jordan	\ √	√ √		
Harmons #87	South Jordan	√ √	√ √		
Harmons #88	Orem	\ √	\ √		
Harmons #91	Roy	N			
Home Depot #4401	Riverdale	<b>N</b>	√ 		
Home Depot #4402	Salt Lake City	√ ./	√ √		
Home Depot #4403	Salt Lake City	1	·		
Home Depot #4406	West Valley City	1	1		
Home Depot #4409	Sandy	1	√ 		
Home Depot #4410	West Jordan	√ /	<b>√</b>	1	
Home Depot #4411	Ogden	√ /	<b>V</b>	√	
Home Depot #4413	Salt Lake City	√ /	<b>V</b>		
Home Depot #4415	Park City	<b>√</b>	√		
Home Depot #4418	Cedar City	√ /	√ /		
Home Depot #4419	Tooele	√ /	<b>V</b>		
Home Depot #4421	Sandy	√ /	<b>√</b>		
Home Depot #8566	Riverton	√ ,	√		
Honks Dollar Store #27	Ogden	√ ,	√		
Kamas Foodtown (Fresh Market)	Kamas	√	√		
Kearsley True Value Hardware	Clearfield				

Retailer	City	CFLs	LEDs	RACs	APS
Lowe's #1080	Riverdale	<b>V</b>	V		
Lowe's #1133	West Valley City	<b>V</b>			
Lowe's #15	Layton	V			
Lowe's #1613	West Jordan	V		$\sqrt{}$	
Lowe's #2275	Salt Lake City	V			
Lowe's #2296	Riverton	<b>V</b>	<b>√</b>		
Lowe's #2606	Sandy	<b>V</b>	<b>√</b>		
Lowe's #2845	Clinton	<b>V</b>	<b>√</b>		
Lowe's #2858	Ogden	<b>V</b>	<b>√</b>		
Lowe's #342	Murray	<b>V</b>	<b>√</b>		
P&D Ace Hardware	Green River	<b>V</b>	<b>√</b>		
Petersons Fresh Market	Riverton	V	V		
Rancho Markets #2	West Valley City	V	V		
Rancho Markets #3	Salt Lake City	V	V		
Rancho Markets #5	Magna	V	V		
Rancho Markets #6	Ogden	· √	· √		
Rancho Markets #7	Salt Lake City	√ √	V		
Rancho Markets #8	Ogden	√ √	√ √		
Ream's Foods #10	Kearns	· √	v V		
Ream's Foods #11	West Jordan	· √	V		
Ream's Foods #12	Salt Lake City	· √	V		
Ream's Foods #15	Sandy	· √	√ √		
Ream's Foods #2	Salt Lake City	· √	V		
Ream's Foods #2	Salt Lake City	· √	V		
Ream's Foods #8	Magna	· √	√ √		
Ream's Foods #9	Sandy	· √	√ √		
Ridley's #1151	Tremonton	· √	v V		
Ridley's #15198	Orem	√ √	V		
Ridley's #15670	Orem	· √	v V		
Sam's Club #4718	South Jordan	· √	v V		
Sam's Club #4730	West Jordan	· √	v V		
Sam's Club #6682	Layton	· √	· √		
Sam's Club #6683	Murray	√ √	√ √		
Sam's Club #6684	Riverdale	· √	√ √		
Sam's Club #6686	Salt Lake City	· √	V		
Smith's #1	Salt Lake City	<b>√</b>	٧		
Smith's #108	Herriman	<b>√</b>			
Smith's #131	Ogden	<b>√</b>			
Smith's #132	Draper	1			
Smith's #137	West Valley City	1			
Smith's #138	South Jordan	1			
Smith's #139	West Jordan	1			
		√ √			
Smith's #140	Surseuse	√ √			
Smith's #142	Syracuse	\ √			
Smith's #144	Orem	√ √			
Smith's #147	West Valley City	N			
Smith's #153	Sandy	-V			

Retailer	City	CFLs	LEDs	RACs	APS
Smith's #158	West Jordan	V			
Smith's #2	Salt Lake City	V			
Smith's #28	Salt Lake City	V			
Smith's #30	Ogden	√ √			
Smith's #42	Cedar City	V			
Smith's #44	Salt Lake City	V			
Smith's #47	Sandy	V			
Smith's #65	Magna	V			
Smith's #66	Salt Lake City	\ √			
Smith's #69	Salt Lake City	\ √			
Smith's #72	Park City	V			
Smith's #73	Pleasant Grove	1			
Smith's #77	Salt Lake City	<b>√</b>			
Smith's #79	North Ogden	V			
Smith's #80	Salt Lake City	1			
		2/			
Smith's #81	Salt Lake City	2/	<b>√</b>		
Smith's Marketplace #279	North Ogden	N A	1		
Smith's Marketplace #475	Salt Lake City	√ √	√ √		
Smith's Marketplace #495	West Jordan	<b>√</b>	√ 		
Smith's Marketplace #94	Salt Lake City	√ /	√ /		
Sutherland Lumber	Salt Lake City	1	√ /		
Target #0768	West Jordan	٧	<b>√</b>		
Target #1752	Sandy	V	<b>V</b>		
Target #1753	Riverdale	<b>V</b>	<b>√</b>		
Target #1754	Orem	V	<b>√</b>		
Target #1755	Layton	V	√		
Target #2123	South Jordan	V	√		
Target #2150	West Jordan	√	√		
Target #2609	West Valley City				
Target #2641	Salt Lake City				
The Market	Park City				
	Duck Creek	V	V		
True Value - Cedar Mountain	Village	<b>'</b>			
True Value Hardware - Castle Valley Co-Op	Huntington		√		
True Value Hardware - Commercial Industrial Supply	Grantsville		√		
True Value Hardware - Losee Lumber	Delta	V	$\checkmark$		
True Value Hardware - Milford	Milford		<b>√</b>		
True Value Hardware - R & R	Tremonton				
True Value Hardware - SLC	Salt Lake City		$\sqrt{}$		
True Value Hardware - Valley Builder	Gunnison	V	<b>√</b>		
True Value Hardware - Walker's	Moab	V	<b>√</b>		
True Value Hardware #11935	Ferron		<b>√</b>		
True Value Hardware #8266	Salt Lake City		V		
True Value Hardware #8630	Cedar City		√ √		
Walgreens #01776	Pleasant Grove	V	·		
Walgreens #02523	Layton	\ \sqrt{\sqrt{ \chi}}			
Walgreens #02527	South Ogden	<b>√</b>			
vvalgicelis muzszi	Journ Oguen	, v			

Retailer	City	CFLs	LEDs	RACs	APS
Walgreens #05875	West Jordan	V			
Walgreens #06281	Draper	V			
Walgreens #06669	South Jordan	V			
Walgreens #06961	Taylorsville	V			
Walgreens #07007	Riverton	V			
Walgreens #09111	Salt Lake City	√			
Walgreens #10415	Tooele	V			
Walgreens #10820	North Ogden	V			
Walgreens #11337	Cedar City	· √			
Walgreens #11524	Herriman	V			
Walgreens #12294	Draper	V			
Walgreens #12639	Holladay	· √			
Walgreens #15013	South Ogden	\ √			
Walgreens #15623	Kearns	<b>√</b>			
Walgreens #2519	Clinton	<b>√</b>			
Walgreens #2529		ν λ			
Walgreens #5737	Syracuse Salt Lake City	√ √			
Walgreens #5757	West Valley City	1			
	Taylorsville	1			
Walgreens #6282	-	1			
Walgreens #6988	West Jordan	\ √			
Walgreens #7495	Roy	1			
Walgreens #9237	Sandy	<b>V</b>			
Walgreens #9238	Salt Lake City	√ ./			
Walgreens #9464	Sandy	√ √			
Wal-Mart - Supercenter #1699	Layton	N	<b>√</b>		
Wal-Mart - Supercenter #2921	Harrisville	V	<b>V</b>		
Wal-Mart - Supercenter #3589	Salt Lake City	√ /	<b>V</b>		
Wal-Mart - Supercenter #3620	Riverton	√ /	<b>V</b>		
Walmart #1438	Cedar City	V	V		
Walmart #1440	Tooele	V	√ /		
Walmart #1686	Taylorsville	√	√ /		
Walmart #1708	Riverdale	V	V		
Wal-Mart #1827	Park City	√	<b>√</b>		
Walmart #2307	South Jordan	V	V		
Walmart #3232	West Jordan	V	V		
Walmart #3568	West Valley City	V	V		
Walmart #3789	Ogden	V	$\sqrt{}$		
Walmart #4208	Salt Lake City		$\sqrt{}$		
Walmart #4689	Cedar Hills		$\sqrt{}$		
Walmart #5109	West Valley City	V	$\sqrt{}$		
Walmart #5110	Draper		√		
Walmart #5120	South Jordan	V	<b>V</b>		
Walmart #5205	Layton	V	<b>V</b>		
Walmart #5206	South Ogden	√	√		
Walmart #5233	West Valley City	V	V		
Walmart #5234	Clinton	V	<b>V</b>		
Wal-Mart #5350	Salt Lake City	V	V		

Retailer	City	CFLs	LEDs	RACs	APS
Walmart #5763	South Jordan		$\sqrt{}$		
Wal-Mart #7168	Herriman	V	$\sqrt{}$		
Wal-Mart of Lindon #5270	Lindon	V			
Walmart of Sandy #5235	Sandy	V			
Wal-Mart of Syracuse #3848	Syracuse	V	$\sqrt{}$		
Winegar's Supermarkets Inc Roy	Roy	V			

## **Downstream Retailers**

Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Ace Hardware - Hurst #5738	Cedar City									1			<b>V</b>										
Ace Hardware -	Ocual City																						
Jones	Castle Dale																						√
Ace Hardware -	Salt Lake																						V
Olympus Hills	City																						V
Ace Hardware -																							$\sqrt{}$
Rasmussen #3961 Ace Hardware -	Gunnison																						
Salt Lake City	Salt Lake City																						$\sqrt{}$
Ace Hardware -	Oity																						
Tremonton #14654	Tremonton																						√
Ace Hardware -																							
Turner Lumber																							√
#4097	Moab																						
Ace Hardware #14886	Highland																						√
Ace Hardware	Pleasant																						<b>V</b>
#9314	Grove																						V
Appliance Discount	D (''.			V																			
Center	Bountiful																						
Appliance Man	Sandy																						√ ./
Appliance	St. George																						$\sqrt{}$

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Wholesalers Plus	J. 1.3																						
Basin Appliance	Vernal		V																				
	Layton																						√
Batteries Plus #358	Salt Lake City																						1
Batteries Plus #359	Sandy																						√
Batteries Plus #754	West Jordan																						√
	Riverdale																						√
Beck's Home Furnishings	Mt Pleasant																						1
Best Buy #1146	West Jordan		V	V		<b>V</b>																	
Best Buy #1402	American Fork		1			<b>V</b>																	
Best Buy #1761	Park City																						
Best Buy #496	Riverdale																						
Best Buy #497	Sandy																						
Best Buy #521	Murray																						
Best Buy #527	Salt Lake City		1	1	<b>√</b>																		
Best Buy #773	Orem																						
Best Buy #891	Washington		√																				
Big Lots #4091	Kearns																						
Big Lots #4095	Salt Lake City																						1
Big Lots #4108	South Ogden																						√
Big Lots #4485	West Jordan																						

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015	
Big Lots #4536	Cedar City																						√	1
Big Lots #4583	Salt Lake City																						√	1
Big Lots #4605	Layton																						√	1
Bill's Home Furnishings Inc	Price		1																					
Bosch Kitchen Center - Orem	Orem																						√	
Bosch Kitchen Center - Sandy	Sandy Salt Lake			√																				-
Bosch Kitchen Center - SLC Bosch Kitchen	City																						1	_
Center - St George	St. George																						√	
Boulevard Home Furnishings	St. George		<b>V</b>	<b>V</b>	<b>V</b>																			
Boyle Appliance Center	Ogden		√	√		√																		_
Carpets Plus	St. George																						1	4
Century Lighting Charlie Fuller's	Ogden																						√	$\frac{1}{2}$
Appliance	Woods Cross		√																					4
Clark's Wholesale	Salt Lake City				√																			
Contract Appliance Sales	Murray																						√	
Costco #1019	South Jordan																							

																						Page	213 o
Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Rotalio	Salt Lake		,							_					_								
Costco #113	City																						
Costco #484	Orem				V																		
Costco #487	Sandy		V																				
Costco #622	West Valley City																						
Costco #672	St. George		-1		-1																		√
Costco #733	Lehi		1		1																		.1
Costco #764	Murray																						√
Costco #770 Craftsman Kitchens & Bath	Ogden Salt Lake City																						√
Curtis Home Furnishings	Salina																						√
Customer Comfort LLC Darrell's Appliance	Centerville																						1
Service & Sales  Delta Jubilee	Benson		√	1																			
Foods	Delta																						√
Dollar Tree #2601	Sandy																						<u> </u>
Dollar Tree #2605	Orem																						
Dollar Tree #2608	Salt Lake City																						
Dollar Tree #2609	Taylorsville																						<u> </u>
Dollar Tree #2612	Ogden																						<u> </u>
Dollar Tree #2630	Draper																						

																						Page	140	1
Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015	
Dollar Tree #2642	Magna																							1
Dollar Tree #2646	Salt Lake City Salt Lake																							1
Dollar Tree #2652	City																							
Dollar Tree #2659	South Jordan																						_	1
Dollar Tree #2665	Cedar City																							1
Dollar Tree #2669	Clinton																							1
Dollar Tree #2670	Salt Lake City																							
Dollar Tree #2678	Tooele																							]
Dollar Tree #2815	West Valley City																							
Dollar Tree #3693	Ogden																							4
Dollar Tree #3696	West Jordan																							4
Dollar Tree #3779	Riverdale																							4
Dollar Tree #3869	Syracuse																						<u> </u>	4
Dollar Tree #4927	Salt Lake City																							
Dollar Tree #4979	South Jordan																							1
Dollar Tree #5018	Ogden																							1
Dollar Tree #5036	Lindon																							1
Duerden's Appliance	Bountiful		V			<b>V</b>																		-
Duncan Lighting & Home	Bountiful																						1	

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Retailer	Salt Lake									_					_			_					
Felt Lighting Inc	City																						√
Fisher Home																							<b>V</b>
Furnishings	Logan																						
For Your Kitchen	Clearfield																						√
Fresh Markets	Jeremy																						V
#2307 Fresh Markets	Ranch Salt Lake																						
#2350	City																						$\sqrt{}$
Fresh Markets	Oity																						,
#2356	Ogden																						√
Fresh Markets																							V
#2365	Park City																						V
Fresh Markets																							V
#2367 Fresh Markets	Taylorsville Salt Lake																						
#2371	City																						√
Fresh Markets	Salt Lake																						
#2372	City																						√
Fresh Markets																							V
#2379	Draper																						V
Fresh Markets #2381	West Valley City																						√
Fresh Markets #2382	Ogden																						<b>V</b>
Fresh Markets #2391	Sandy																						<b>V</b>
Galaxie Lighting	Lindon																						<b>√</b>
Galaxie Lighting	LITUUT									<u> </u>				<u> </u>									٧

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Granite Furniture	West Jordan									_					<del>-</del>								<b>√</b>
Habitat for Humanity Restore #1	Salt Lake City																						1
Hard Hat Furniture and Appliance	Price																						√
Harmons #1	West Valley City																						<b>V</b>
Harmons #14	Draper																						
Harmons #16	Draper																						
Harmons #2	Midvale																						√
Harmons #21	Salt Lake City																						1
Harmons #24	Salt Lake City																						√
Harmons #33	Kearns																						V
Harmons #5	Ogden																						√
Harmons #86	South Jordan																						√
Harmons #87	South Jordan																						<b>√</b>
Harmons #88	Orem																						<b>√</b>
Harmons #91	Roy		,																				√
Heber Appliance	Heber City		√ /	,		,		,		,			,				,			,	,		<u> </u>
Home Depot #4401	Riverdale		√	1		V	√	1		√			√				√			V	√		
Home Depot #4402	Salt Lake City		1	1		1	√			√			√			√	1			1	√	1	
Home Depot #4403	Salt Lake City		√	√		<b>V</b>	√	<b>V</b>		√	V		√				√			√	√	√	

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015	
Netallel	West Valley									_	_				_			_						1
Home Depot #4406	City		V	√		V																		
Home Depot #4407	Lindon		V	1	<b>√</b>	V	<b>√</b>	V		<b>V</b>			<b>V</b>				V				V			1
Home Depot #4408	Centerville		V	1		V	<b>V</b>	<b>V</b>		√			<b>V</b>				<b>V</b>		<b>√</b>	V	<b>V</b>	<b>V</b>		1
Home Depot #4409	Sandy		1	<b>V</b>	<b>√</b>	<b>V</b>	<b>V</b>	<b>V</b>		√	1		√				<b>V</b>			V	<b>V</b>			1
Home Depot #4410	West Jordan		V	<b>V</b>		V	<b>V</b>			<b>√</b>			√				<b>V</b>			V		<b>V</b>		1
Home Depot #4411	Ogden		V	V	<b>√</b>	V	<b>V</b>	V		V			<b>V</b>				√			V				1
Home Depot #4412	Washington	V	V			V	<b>√</b>			√														1
Home Depot #4413	Salt Lake City		1	1		<b>V</b>	V			1			<b>√</b>				1			1	<b>√</b>	1		
Home Depot #4414	Logan						$\checkmark$																	
Home Depot #4415	Park City		V			V											√							
Home Depot #4416	Provo		<b>V</b>			V				√			√				√							1
Home Depot #4417	American Fork		<b>V</b>	<b>√</b>	<b>V</b>	<b>V</b>	V			<b>V</b>			<b>V</b>				1			<b>V</b>	<b>V</b>	1		
Home Depot #4418	Cedar City				$\checkmark$		$\checkmark$						$\sqrt{}$											
Home Depot #4419	Tooele		√		$\checkmark$	V				V			$\sqrt{}$											
Home Depot #4420	St. George		V	<b>V</b>		V	<b>√</b>						1											
Home Depot #4421	Sandy		V	<b>V</b>	<b>√</b>	<b>V</b>	√			V			1				<b>√</b>		<b>√</b>		<b>V</b>			1
Home Depot #4422	Richfield		V		√	V	V	V		V			<b>V</b>											1
Home Depot #8566	Riverton		V	<b>V</b>	<b>V</b>	<b>V</b>	V	V		V			<b>V</b>				<b>√</b>			<b>V</b>	<b>√</b>			1
Home Depot #8583	Layton		<b>V</b>	1	<b>√</b>	V	<b>√</b>	V		V			<b>V</b>				<b>√</b>			<b>√</b>	<b>V</b>			1
Home Selections by Fergusons	Salt Lake City		1	<b>V</b>	<b>V</b>																			
Homestar Windows	Sandy																						√	

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
& Doors	City									ш					-			_					
Hooker Appliance																							
Inc	Logan																						
Hutch's Home	Logan		,																				
Furnishings	Lehi																						
IKEA	Draper																						V
Interiors Inc	Park City																						V
Kay's TLC Lighting																							V
One	St. George																						ν
Kiesel Sales &																							
Service	Ogden																						
Knowles Home																							
Furnishings Liddiard Home	Moab																						<u> </u>
Furnishings	Tooele																						
Lighting Design #1	Layton																						<b>√</b>
Lighting Design #3	Draper																						<b>√</b>
Lighting Specialists	Біареі																						
#1	Midvale																						
Lowe's #1080	Riverdale		V	V	1		<b>√</b>	<b>V</b>		1			<b>√</b>										
Lowe's #1118	St. George	<b>√</b>	1	1			V	-		1			•										
25.75 6 11 11 10	West Valley	<u> </u>		,	1	1		1					1							1	1		
Lowe's #1133	City		1	V	1	√	√	√		√			$\checkmark$							√	$\sqrt{}$		
Lowe's #15	Layton		V	V	V	V	<b>√</b>	V		V	1		$\sqrt{}$				V				V		
Lowe's #1501	Logan		V	V	1		<b>√</b>			√													
Lowe's #1613	West Jordan		V	<b>V</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>V</b>		√			1										
Lowe's #178	Orem		<b>V</b>	V	V	<b>V</b>		V		√			<b>V</b>				V						

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
1100001	Salt Lake		,	,	,	1	1	,		,			1	,			,						
Lowe's #2275	City				1	√	√			V			$\checkmark$	1			1						
Lowe's #2293	Lehi		V	V	V																		
Lowe's #2296	Riverton		V	V	V		√			V			√		<b>V</b>						<b>V</b>		
Lowe's #2606	Sandy		1	V	V		<b>√</b>			1							1	V	V	1			
Lowe's #2662	West Bountiful		<b>V</b>	<b>V</b>	<b>V</b>		V			1	<b>V</b>		V								V		
Lowe's #2834	Vernal												$\checkmark$										
Lowe's #2845	Clinton						$\sqrt{}$						$\checkmark$										
Lowe's #2858	Ogden									1			$\checkmark$		√								
Lowe's #342	Murray		1	√	√					1							1				V		
Mountain Land Design - Layton	Layton																						√
Mountain Land Design - SLC	Salt Lake City		√	√	<b>V</b>	V																	
Murphy's Appliance	Brigham City		V	V																			
Ogden's Superstore	Richfield		√	√		√																	
Orson H. Gygi	Salt Lake																						$  \sqrt{ }$
Company	City																					$\vdash \vdash \vdash$	$\vdash$
Rancho Markets #2	West Valley City																						√
Rancho Markets #3	Salt Lake City																						<b>√</b>
Rancho Markets #5	Magna																						<b>√</b>
Rancho Markets #6	Ogden																						<b>√</b>
Rancho Markets #7	Salt Lake																						

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
	City																						
Rancho Markets #8	Ogden																						$\sqrt{}$
RC Willey - Murray	Murray		V	V	V	√																	
RC Willey - Orem	Orem		1	<b>V</b>	1	√																	
RC Willey - Riverdale	Riverdale		<b>V</b>	<b>V</b>	<b>V</b>	V																	
RC Willey - Syracuse	Syracuse		1	<b>V</b>	1	1									V								
RC Willey- Draper	Draper																						
RC Willey Home Furnishings	Salt Lake City		1	<b>V</b>	1	1																	
Ream's Foods #10	Kearns																						$\sqrt{}$
Ream's Foods #11	West Jordan																						$\sqrt{}$
Ream's Foods #12	Salt Lake City																						<b>√</b>
Ream's Foods #15	Sandy																						$\sqrt{}$
Ream's Foods #6	Salt Lake City																						<b>V</b>
Ream's Foods #8	Magna																						1
Ream's Foods #9	Sandy																						1
Reliable Maytag Home Appliance Center	St. George																						√
Reliance Lighting	St. George																						<b>V</b>
Ridley's #1151	Tremonton																						<b>V</b>
Ridley's #15198	Orem																						V

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015	
Sam's Club #4718	South Jordan					1			_	ш					_			_					_	٩
Sam's Club #4718	West Jordan					\ √																	_	$\exists$
Sam's Club #4730	Layton					1																	$\vdash$	$\exists$
Sam's Club #6683	Murray					V																	1	-
Sam's Club #6684	Riverdale					1																	- V	$\dashv$
3aiii 8 Ciub #0004	Salt Lake																						<del>                                     </del>	$\exists$
Sam's Club #6686	City					V																		
Sears	Layton		V		<b>V</b>																			1
Sears #1118	Salt Lake City		<b>V</b>	<b>V</b>	<b>V</b>																			1
Sears #1301	Provo		1	1	<b>V</b>	1																		٦
Sears #1718	Ogden		V	V	V																			٦
Sears #1888	West Jordan		V	<b>V</b>	<b>V</b>	1																		٦
Sears #2220	St. George		<b>V</b>																					٦
Sears #2559	Sandy		V	<b>V</b>	<b>√</b>																			1
Sears #3058	Price		V		<b>V</b>																			7
Sears #3519	Vernal		V	V																				1
Sears #3529	Cedar City		V		<b>V</b>																			1
Sears #3539	Logan				√																			٦
Sears #3962	Richfield		V																					٦
Sears #5202	Heber City																						√	٦
Sears #7173	Ephraim																						√	٦
Sears #7408	Tooele		V																					
Smith's #1	Salt Lake City																						√	
Smith's #108	Herriman																						√	1

																						Page	22 (	1
Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015	
Smith's #131	Ogden																						1	1
Smith's #132	Draper																						√	1
Smith's #137	West Valley City																						√	]
Smith's #138	South Jordan																						√	╛
Smith's #139	West Jordan																						√	4
Smith's #140	Sunset																						1	_
Smith's #142	Syracuse																						√	
Smith's #144	Orem																						1	
Smith's #147	West Valley City																						√	
Smith's #153	Sandy																						√	
Smith's #158	West Jordan																						√	╛
Smith's #2	Salt Lake City																						√	
Smith's #28	Salt Lake City																						√	
Smith's #30	Ogden																						√	
Smith's #42	Cedar City																						1	╛
Smith's #44	Salt Lake City																						√	
Smith's #47	Sandy																						√	
Smith's #65	Magna																						√	
Smith's #66	Salt Lake City																						√	
Smith's #69	Salt Lake																						√	1

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Ttotallo!	City																						
Smith's #72	Park City																						<b>V</b>
Smith's #73	Pleasant Grove																						1
Smith's #77	Salt Lake City																						1
Smith's #79	North Ogden																						
Smith's #80	Salt Lake City																						√
Smith's #81	Salt Lake City																						√
Smith's Marketplace #475	Salt Lake City																						√
Smith's Marketplace #495	West Jordan																						√
Smith's Marketplace #94	Salt Lake City					√																	
Southeastern Appliance Center	Moab																						√
Southwest Appliance Wholesale	Cedar City		1	<b>V</b>																			
Sparrow's Home Furnishings	Roy		<b>V</b>																				
Sutherlands - Price	Price																						√
Sutherlands - SLC	Salt Lake City						√			√			V										
Target #0768	West Jordan																						

																						Page	24 o
Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Target #1752	Sandy																						√
Target #1753	Riverdale																						√
Target #1754	Orem																						√
Target #1755	Layton																						√
Target #2123	South Jordan																						√
Target #2150	West Jordan																						√
Target #2609	West Valley City																						√
Target #2641	Salt Lake City					√																	
The Galleries	Vernal																						√,
The Lighthouse #1	Sandy																						√
Thermal Solutions LLC	Springville																						1
Thomson Premier Lighting & Appliance Center	Logan																						1
Tod R Packer Heating & Air Conditioning	Bluffdale																						1
True Value - Cedar Mountain	Duck Creek Village																						<b>V</b>
True Value Hardware - Losee Lumber	Delta																				√		
True Value Hardware - Valley	Gunnison																						1

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Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor,Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Builder																							'
True Value Hardware - Walker's	Moab																						1
U & I Furniture																							V
Company	Logan																						
USA Appliance - SLC	Salt Lake City																						1
	Pleasant																						V
Walgreens #01776	Grove																						
Walgreens #02523	Layton																						V
Walgreens #02527	South Ogden																						V
Walgreens #05875	West Jordan																						V
Walgreens #06281	Draper																						V
Walgreens #06669	South Jordan																						V
Walgreens #06961	Taylorsville																						V
Walgreens #07007	Riverton																						V
Walgreens #09111	Salt Lake City																						√
Walgreens #10415	Tooele																						
Walgreens #10820	North Ogden																						V
Walgreens #11337	Cedar City																						V
Walgreens #11524	Herriman																						V
Walgreens #12294	Draper																						V
Walgreens #12639	Holladay																						V
Walgreens #15013	South Ogden																						1

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Electric Water Heater  Clothes Washer  Clothes Washer  Clothes Washer  Bishwasher  Freezer  F	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Walgreens #2519 Clinton				<b>V</b>
Walgreens #2529 Syracuse				V
Salt Lake Walgreens #5737 City				<b>√</b>
West Valley Walgreens #5929 City				V
Walgreens #6282 Taylorsville				$\sqrt{}$
Walgreens #6988 West Jordan				$\sqrt{}$
Walgreens #7495 Roy				1
Walgreens #9237 Sandy				$\sqrt{}$
Salt Lake Walgreens #9238 City				V
Walgreens #9464 Sandy				$\sqrt{}$
Wal-Mart - Supercenter #1699 Layton				√
Wal-Mart - Supercenter #2921 Harrisville				√
Wal-Mart - Salt Lake Supercenter #3589 City				√
Wal-Mart - Supercenter #3620 Riverton				
Walmart #1438 Cedar City				$\sqrt{}$
Walmart #1440 Tooele				$\sqrt{}$
Walmart #1686 Taylorsville				$\sqrt{}$
Walmart #1708 Riverdale				V
Wal-Mart #1827 Park City				$\sqrt{}$

																						Page	27 of
Retailer	City	Electric Water Heater	Clothes Washer	Dishwasher	Freezer	Refrigerator	Evaporative Cooler - Permanently Installed, Self- Installed	Evaporative Cooler - Portable	Evaporative Cooler - Premium	Evaporative Cooler - Premium, Self-Installed	Evaporative Cooler - Premium Ducted, Self-Installed	Evaporative Cooler - Replacement	Evaporative Cooler - Replacement, Self-Installed	Heat Pump Water Heater	Heat Pump Water Heater, Self- installed	Insulation-Attic	Insulation-Attic, Self-Installed	Insulation-Combination Bonus	Insulation-Floor, Self-Installed	Insulation-Wall	Insulation-Wall, Self-Installed	Windows	No Redemptions in 2015
Walmart #2307	South Jordan																						<b>V</b>
Walmart #3232	West Jordan																						1
Wallian #0202	West Valley																						
Walmart #3568	City																						√
Walmart #3789	Ogden																						<b>√</b>
Walmart #4689	Cedar Hills																						<b>V</b>
Walmart #5109	West Valley City																						√
Walmart #5110	Draper																						√
Walmart #5120	South Jordan																						
Walmart #5205	Layton																						
Walmart #5206	South Ogden																						√
Walmart #5233	West Valley City																						V
Walmart #5234	Clinton																						$\sqrt{}$
Wal-Mart of Lindon #5270	Lindon																						√
Walmart of Sandy #5235	Sandy																						√
Wal-Mart of Syracuse #3848	Syracuse																						√
Wilkinson's House of Lighting	St. George																						<b>V</b>

## **HVAC Trade Allies**

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
A Better Service Co	Murray														1							
A. Johnson Heating	Wellington																					1
A+ Mechanical LLC	Riverton																					√
AAA Cooling and Heating	Sandy																					V
ABC Swamp Cooler	Layton														V	V	√					
Absolute Air Heating and Air Conditioning	Mapleton			1	1							1										
Absolute Quality Air, Inc	Salt Lake City				√							√				√						
ABT Mechanical	Midvale																					1
Ace Air Conditioning & Heating LLC	Salt Lake City													√	1	<b>V</b>	1					
Ace Remodeling	Richmond			√								1										
Action Plumbing, Heating, and AC	West Jordan	1		1	1	1					<b>V</b>	1										

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Advanced Heating & Air Conditioning, Inc.	Logan																					V
Advanced Heating and AC Inc	Logan																					
Advantage Heating and Air	West Jordan											√										
Affordable Heating and Cooling Inc	Salt Lake City	√		1	1	<b>V</b>						1										
After Hours Heating & Cooling	Holladay			√																		
Air Care Professionals, LLC.	St. George																					√
Air Design Heating and Cooling LLC	Murray		√		1	√						1										
Air Express Heating and Air Conditioning Inc	Lehi	1		1	1							1										
Air Force Heating & AC Inc	Pleasant grove														1							
Air Now Heating & Air Conditioning	Ogden			1	1	√	1					1								$\sqrt{}$		
Air Specialist	Tremonton																<b>V</b>					
Air Tight Energy Inc. (Omnia Services Group)	Orem									1												

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	ive Cooler	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Aire Expresso Heating & Cooling	Tooele				√							1										
Aire Serv of Salt Lake/Tooele	Salt Lake City	√	√	<b>V</b>	<b>V</b>	<b>V</b>		<b>V</b>				1										
Aire Serv of Utah Valley (Comfort Tech)	Orem		√			1						√										
Aire-Flo Heating and Air Conditioning, Inc.	Murray											1										
Airtime Heating and Cooling	Bluffdale			√																		
Airworx Heating & Air Conditioning	Midvale															√						
All Service LLC	Ogden																					√
Alldredge & Peters Plumbing LLC	Farmington														<b>V</b>							
All-Pro HVAC	Ogden		√									V										
Allred's Inc.	Ogden																					1
Alta Air Conditioning & Heating	Woods Cross																					1
Amador Heating & Air	American Fork																					1
American HVAC	Orem				√							V										

Trade <b>A</b> lly	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Anderson HVAC	Pleasant View															V						
Any Hour, Inc.	Orem				√																	
Archery Contracting Inc	Salt Lake City																					√
Arrant Heating	Clearfield	√	V	V	V			V				V			V							
Artic Air of Southern Utah	St. George																					√
Arv's Trailer Repair	West Haven																					
Aspen Air Heating & Cooling LLC	Sandy											1										
Atmosphere Technologies	West Valley City																					√
Authority Heating & Cooling	Orem				<b>V</b>							1										
Automated Heating & Air Conditioning Inc.	Ogden																					1
Barwick Heating & Cooling	Springville																					V
Ben Henry Heating	Ogden																					√
Bergmann Heating and Air Conditioning	Orem		√		1						√	1										

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Cooler -	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Best Property Improvements Inc.	Holladay									√												
Bills Comfort Systems	Layton	V	√	V	V	V																
Bill's Comfort Systems Murray	Murray		V																			
Black Diamond Repairs & Maintenance, LLC.	Layton		√	1	1	1						√										
Boulard Heating & Air Conditioning	West Jordan				1	<b>√</b>						<b>V</b>		√	√		√					
Brian's Canvas Products	Clearfield																					√
Brigham Heating & Cooling	Brigham City																					$\sqrt{}$
Bryan Pons Enterprises	Taylorsville														V	1						
Budget Plumbing & Rooter LLC	American Fork																					<b>√</b>
Call Climate Services	Centerville	√	√	1	√	1	V					√								√		
Cambria Property Management, LLC.	Murray																					1
Carpenter Furnace Co Inc	Ogden		√		√																	

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
CCR Construction	Clearfield																1					
Cedar Valley Heating & Air Conditioning	Cedar City				1										1	√						
Central Valley Mechanical	Nephi																					$\sqrt{}$
Certified Maintenance	West Valley City																					1
Cherringtons Incorporated	West Valley City																					√
Christoffersen Heating and AC Inc	North Logan																					√
Climate Doctor LLC	Payson																					√
Cluff Building & Fencing LLC	Manti																					$\sqrt{}$
Comfort Champions	Draper	√	√		√	√		√					√									
Comfort Level Heating & Air Conditioning	Holladay																					√
Comfort Solutions	Ogden	1	√	√	1	1		√				√								√		
Comfort Systems USA	Salt Lake City	V	√	√	1	V		√				√								√		
Comfort Zone/ PC Industries	Salt Lake City				√																	

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Complete Comfort Heating & Air Conditioning	Springville		√		1						√											
Concept Property Management, Inc.	Riverton														<b>V</b>							
Connect Building Services, Inc	Sandy		√		1																	
Craig's Superior Appliance	Bountiful																					V
Crofts HVAC LLC.	Panguitch																					√
CTR Heating and Air	West Jordan				√																	
Custom Air, Inc.	Murray														1					$\sqrt{}$		
Custom Comfort	Centerville																					
CW Heating and Air	Riverton																					
D Blake Electric & Refrigeration, Inc.	St George																					1
Daniels Plumbing & Heating, Inc.	Vernal																					1
Denny's Service Co	South Ogden	√			1			√				√										
Desert Star Heating & Air Conditioning	South Salt Lake City					1									<b>√</b>							1

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Desert Star Heating & Air Conditioning	Millcreek											1										
Design Comfort	Salt Lake City																					
Dick Kearsley Service Center	Clearfield											V		V		V						
DMC Heating and A/C LLC	Tremonton																					√
Eagar Heating & Cooling	Pleasant Grove																					1
EcoServices Intermountain	Ogden					V																
Elite Energy Solutions	Lindon				V							V										
Elite Heating & Air Conditioning, LLC.	West Jordan				1																	
Energy Savers Insulation	Layton									<b>V</b>					1							
Energy Wise Insulation	Salt Lake City									<b>V</b>												
Environmental Refrigeration Services Inc Heating and Cooling (ERS Inc)	Plain City				1										V							
ESCO Services	Salt Lake City		√	1	√	1						1								√		
Express Air Heating & Cooling	Sandy																				_	√

Trade Aliy	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Fahrenheit Heating & Air Conditioning	Mapleton					√						1									
Five County Association of Government	St. George																				1
Forced Aire LLC	Layton				√																
Fresh Air Heating & Cooling LLC	Salt Lake City																				1
Furmark Inc	Riverdale																				$\sqrt{}$
Gary Ricks Service	Logan																				
Gause Heating and Appliance	Santaquin																				$\sqrt{}$
Genuine Comfort HVAC	Centerville																				
Gillette Heating and Air Conditioning	Payson			1	1																
GNL, Inc.	Spanish Fork				√																
Goldstone Place Apartments	Clearfield																				√
Graves Heating & Building Inc.	Springville																				√
Gunther's Comfort Air	American Fork	√	V	√		1	√	√													

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
H & M Heating	Kaysville			√	1																	
Hansens HVAC & Plumbing Services	West Jordan				1							√								<b>V</b>		
Hartman Plumbing, Heating, and Air	Sandy	1		√	1	√		1				√			1					V		
Harwood Mechanical	North Salt Lake																					1
Healthy Home	Salt Lake City																					V
High Country HVAC, Inc.	Centerville		√		V		V				V											
Hill Heating & Air	West Bountiful																					√
Holmes & Holmes Industrial	Magna		V		V						V											
Holmes Heating & Cooling	Lehi				√	1																
Home Energy Experts	Clearfield									√												
Home Energy Solutions	Centerville									√												Ш
Housing Authority of Utah County	Provo																					1
HRC Climate Services	Spanish Fork																					√
Huish Heating and A/C Inc.	Taylorsville		√		V																	

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Humphrey Heating and Air	Bountiful											√										
Hustad Mechanical Inc	Nibley			√		√						√										
HVAC Construction Inc	North Salt Lake		√		√	√						√										
HVAC Plus, Inc.	Salt Lake City				V																	
Hyland Heating	West Jordan											√			√			√		$\sqrt{}$		
Ideal Heating & Cooling, Inc.	Park City				√							√			√							
Interwest Refrigeration, LLC.	Orem																					√
iRepair Heating & Air, Inc.	Sandy		√	√	√																	
J & M Plumbing, Heating & Air Inc.	West Jordan													V			√					
James Turner	Orem																					√
Jenson Refrigeration	Salt Lake City				V							√										
JM Mechanical	Hyde Park				√							√										
Johansen Heating and Air	La Verkin														√		√					
John W. Hansen & Associates	South Ogden																					$\sqrt{}$

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Jones Heating & Air Conditioning	West Valley City			1	1	1						1			<b>V</b>							
Just Right Heating & Cooling, LLC.	Salt Lake City	1	√	1	1	1		1			1	1										
K Lund Mechanical	West Jordan														√							
K.O. Installers, Inc.	Plain City													V	V		<b>V</b>					
KC Heating and Air	Murray																					√
Kelly's Heating and Cooling	South Salt Lake City		V		1												V					
Kozy HVAC LLC	West Jordan																					V
L.J. Kaufman Construction	Salt Lake City																					√
Larsen Heating & Air Conditioning	Saratoga Springs											1										
Lee's Heating and Air	Salt Lake City			V	1	1						1										
Livingston Maintenance Staff	Salt Lake City																V					
Luna Heating & Air Conditioning, LLC.	Layton																					V
Lutz Heating Inc.	Smithfield																					

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed		Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
M & M Heating & Air Conditioning, Inc.	Williard																					
Maddox Construction	West Jordan																					V
Main Street Heating & Cooling	Bluffdale			<b>√</b>	V																	
Majestic Reality & Development	Clearfield														1							
Manwill Plumbing and Heating	Salt Lake City			√	√	√	V	V			V						$\checkmark$			V		
Mechanical Service & Systems	Midvale																					<b>√</b>
Mel Fower Heating and Cooling	Ogden											$\sqrt{}$										
Method Air HVAC	Sandy																					
Mike Hansen's HVAC Solutions	Syracuse																					
Millcreek Plumbing Inc.	Salt Lake City																$\checkmark$					
Moab Heat & Cool, LLC.	Moab														1		√		V			
Modern Mechanical	Roy		√		1	√					√	$\sqrt{}$										
Mountain Air Conditioning and Heating	Ogden	√		√	1	√	1													<b>V</b>		
Mountain Valley Heating & Air	Wellsville																					√

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing		CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Mountainwest HVAC, Inc.	North Salt Lake	√	√	√	√	√	√	√				√			√							
National Swamp Cooler LLC	Las Vegas																					√
Nebo Comfort Systems	Genola											V										
Neerings Plumbing & Heating	Salt Lake City				1	√						√					√					
Nelson's Heating & Refrigeration	Moab																					1
Nichols HVAC, LLC.	Murray																					√
One Hour HVAC	Ogden																					√
Outfitters HVAC, Inc	Centerville																					$\sqrt{}$
Parley's PPM LLC	Orem				V										<b>V</b>							
PerfecTemp Heating and Air	Ogden											√								<b>V</b>		
Perform Heating & Cooling, Inc	Bountiful				√							<b>V</b>										
Performance HVAC LLC	Sandy														1							
Peterson Refrigeration	Gunnison			√	1							1	$\sqrt{}$									
Pleasant Air	Pleasant Grove																					$\sqrt{}$
Pond's Plumbing Heating AC	North Salt Lake																					

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	ive Cooler	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Precise Plumbing Heating & AC	Midvale				√																	
Preferred Service Heating, Cooling and Air Purity Inc	South Jordan				1							√					√					
Professional Heating and Air Conditioning	Pleasant Grove			1	1																	
Redrock Heating & Cooling LLC	Murray																√					
Rentmeister Total Home Services	Syracuse				1							<b>V</b>			1							
Right Call Heating and AC	West Valley City																					√
Rocky Mountain Air Systems	Midvale																					V
S&S Mechanical	St George																					√
Salmon HVAC	Centerville			√	√						√	√										
Salt City Heating and Air Conditioning	Salt Lake City														1		√					
Same Day Heating and Air	Salt Lake City	1	√	1	1	√	1	V			V	<b>V</b>										
Scott Hale Plumbing, Heating & Air	Salt Lake City																					

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
SCP Heating & Air Conditioning	Layton																					1
Select Comfort Systems	West Valley City															√						
Service Experts Heating & Air Conditioning	Ogden	√	1	1	1	1	1					1					1					
Service Experts of Salt Lake City	Midvale	<b>V</b>	<b>V</b>	√	V	<b>V</b>	V					√										
Service Experts of Utah	Midvale			√	V	√	V	V			1	<b>V</b>										
Sevier Heating & Air Conditioning	Elsinore																					<b>V</b>
Sheya Enterprises	Salt Lake City				V																	
Six County Association of Governments	Richfield																					√
SK Air LLC	Murray											1										
Sloan Construction Corp.	Salt Lake City																√					
Smedley & Associates Plumbing and Heating	Layton	√	√	1	1	1		1				1										

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Cooler -	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Snow Canyon Heating & Cooling Inc	St George																					√
Southwest Air Conditioning Heating and Energy LLC	St George																				<b>V</b>	
Spartan Mechanical S	South Ogden																					V
Stallings Sheet Metal	Мt. Pleasant																					$\sqrt{}$
Straightline Plumbing LLC S	St George				√							V										
Summit Insulation Inc.	West Valley																					√
Superior Water and Air, Inc.	West Valley City		$\checkmark$		V		√	V				$\sqrt{}$					$\checkmark$					
SwampTech N	<b>1</b> urray														$\sqrt{}$	V						
Taylor HVAC, Inc.	Sandy																					√
Thompson's Comfort Connection	<b>1</b> idvale	√		√	1	√					V	V								V		
Tingey Plumbing and Heating	<b>1</b> urray																					1
Titan Heating & Air Conditioning	West Jordan				1							V										
Tod R Packer Heating & Air B	Bluffdale																					√

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Triple T Inc	Spanish Fork	√	√	√	√	√		√				V							√	√		
Trumax Inc	Hurricane																					V
Uintah Basin Association of Governments	Roosevelt																					1
USI Cardalls LLC	Logan																					√
Wall Service	West Valley City																					√
Walton Plumbing, Heating, and Air	Murray																					<b>V</b>
Warner Heating	Riverton																					V
Wasatch Property Management	Logan																					1
Welch Heating and Air Conditioning	Salt Lake City																					1
Wernli Inc	Salt Lake City														<b>V</b>							
West Brothers Inc	Salt Lake City				1							1										
Western Heating & Air Conditioning	Orem		<b>V</b>	1	√							1										
Western Mechanical Inc.	Logan		$\sqrt{}$		√	√						√										

Trade Ally	City	CAC Best Practice Installation	CAC Best Practice Installation & Sizing	CAC Equipment	CAC Equipment - Tier I	CAC Equipment - Tier 2	CAC Equipment - Tier 3	CAC Proper Sizing	Duct Sealing	Duct Sealing & Insulation	ECM Retrofit, Gas Furnace	Efficient Gas Furnace with ECM	Electric System to Heat Pump Conversion - Tier 2	Evaporative Cooler - Permanently Installed	Evaporative Cooler - Premium	Evaporative Cooler - Premium Ducted	Evaporative Cooler - Replacement	Heat Pump, Multi-Head, Ductless	Heat Pump, Single-Head, Ductless	Heat Pump, Supplemental, Ductless	Heat Pump to Heat Pump Upgrade - Tier 2	No Redemptions in 2015
Whipple Service Champions	Salt Lake City			√	1							V										
Xcellence, Inc	Park City																					$\sqrt{}$

## **Plumbing Trade Allies**

Truce rimes			
Trade Ally	City	Heat Pump Water Heater	No Redemptions in 2015
Ace Remodeling	Richmond		
A. Johnson Heating	Wellington		V
Absolute Air Heating and Air Conditioning	Mapleton		$\sqrt{}$
Advantage Heating and Air	West Jordan		$\sqrt{}$
Air Express Heating and Air Conditioning Inc	Lehi		$\sqrt{}$
Aire Expresso Heating & Cooling	Tooele		<b>√</b>
Airworx Heating & Air Conditioning	Midvale		√
All Service LLC	Ogden		V
Alta Air Conditioning & Heating	Woods Cross		V
Any Hour, Inc.	Orem		√
Aspen Air Heating & Cooling LLC	Sandy		V
Authority Heating & Cooling	Orem		$\sqrt{}$
Automated Heating & Air Conditioning Inc.	Ogden		$\sqrt{}$
Barwick Heating & Cooling	Springville		$\sqrt{}$
Boulard Heating & Air Conditioning	West Jordan		√
Budget Plumbing & Rooter LLC	American Fork		$\sqrt{}$
Budget Plumbing & Rooter LLC	American Fork		√
Climate Doctor LLC	Payson		$\sqrt{}$
Comfort Level Heating & Air Conditioning	Holladay		$\sqrt{}$
Comfort Solutions	Ogden		$\sqrt{}$
Comfort Zone/ PC Industries	Salt Lake City		V
Comfort Zone/ PC Industries	Salt Lake City		V
Connect Building Services, Inc	Sandy		V
Daniels Plumbing & Heating, Inc.	Vernal		√
Eagar Heating & Cooling	Pleasant Grove		√
ESCO Services	Salt Lake City		√
ESCO Services	Salt Lake City		V

Trade Ally	City	Heat Pump Water Heater	No Redemptions in 2015
ESCO Services	Salt Lake City		$\sqrt{}$
Forced Aire LLC	Layton		$\sqrt{}$
Graves Heating & Building Inc.	Springville		$\sqrt{}$
Hartman Plumbing, Heating, and Air	Sandy		$\sqrt{}$
Harwood Mechanical	North Salt Lake		$\sqrt{}$
Healthy Home	Salt Lake City		$\sqrt{}$
High Country HVAC, Inc.	Centerville		$\sqrt{}$
Holmes & Holmes Industrial	Magna		$\sqrt{}$
Holmes Heating & Cooling	Lehi		$\sqrt{}$
Hustad Mechanical Inc	Nibley		$\sqrt{}$
Ideal Heating & Cooling, Inc.	Park City		$\sqrt{}$
iRepair Heating & Air, Inc.	Sandy		
Jenson Refrigeration	Salt Lake City		$\sqrt{}$
JM Mechanical	Hyde Park		$\sqrt{}$
L.J. Kaufman Construction	Salt Lake City		$\sqrt{}$
Main Street Heating & Cooling	Bluffdale		$\sqrt{}$
Mechanical Service & Systems	Midvale		
Mike Hansen's HVAC Solutions	Syracuse		
Neerings Plumbing & Heating	Salt Lake City		$\sqrt{}$
Parley's PPM LLC	Orem		1
Pleasant Air	Pleasant Grove		$\sqrt{}$
Rocky Mountain Air Systems	Midvale		$\sqrt{}$
S&S Mechanical	St George		$\sqrt{}$
Select Comfort Systems	West Valley City		$\sqrt{}$
Service Experts Heating & Air Conditioning	Ogden		$\sqrt{}$
Service Experts of Salt Lake City	Midvale		$\sqrt{}$
Service Experts of Utah - Provo	Midvale		$\sqrt{}$
Sevier Heating & Air Conditioning	Elsinore		<b>√</b>
Smedley & Associates Plumbing and Heating	Layton		$\sqrt{}$
Southwest Air Conditioning Heating and Energy LLC	St George		<b>V</b>

Trade Ally	City	Heat Pump Water Heater	No Redemptions in 2015
Stallings Sheet Metal	Mt. Pleasant		$\sqrt{}$
Taylor HVAC, Inc.	Sandy		$\sqrt{}$
Wall Service	West Valley City		$\sqrt{}$

## Weatherization Trade Allies

						015
Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
5 Star Building Products, LLC.	Orem	<b>√</b>	1			
AAA Insulation	Saratoga Spring	<b>V</b>	V			
ABCO Glass Products	Lindon			<b>V</b>		
Absolute Air Heating and Air Conditioning	Mapleton	<b>V</b>	V			
Ace Remodeling	Richmond					<b>V</b>
Advanced Insulation	Morgan	<b>V</b>	V			
Advanced Window Products, Inc.	Salt Lake City			<b>V</b>		
Advantage Home Improvements Inc	Clearfield			V		
Advantage Window & Door LLC	Taylorsville					
Affordable Insulation	West Jordan					<b>V</b>
Air Tight Energy Inc. (Omnia Services Group)	Orem					V
All Purpose Windows & Doors-Salt Lake City	Salt Lake City					
All Purpose Windows and Doors	St. George					
All Western Windows Inc.	West Haven					
Alpine Exteriors, LLC.	South Jordan					
Amador Heating & Air	American Fork			$\sqrt{}$		
American Exteriors LLC	West Valley City			$\sqrt{}$		
American Home Services, Inc.	Orem			$\sqrt{}$		
Any Time Glass Service, Inc	Salt Lake City					$\sqrt{}$
Apex Energy Solutions LLC	Salt Lake City			$\sqrt{}$		
Applied Energy Solutions	Woods Cross	√	V			
Archery Contracting Inc	Salt Lake City	√	√			
ARMstrong Construction, Inc.	West Valley City	√	V			
Attic Insulation Inc.	West Jordan					√
Attic Pro Insulation	American Fork					√
Barton Insulation	Vernal					√
BDI Insulation of Salt Lake City	Salt Lake City		1			

Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
Bennett's Glass of Logan	Logan					
Best Property Improvements Inc.	Holladay	V	V			
BMC West	Idaho Falls					
Bonded Insulation	Salt Lake City					
Bruce Allsop Insulation	Hyrum		V			
Burton Lumber Insulation	Salt Lake City					
Caco Construction Corp.	Lehi					
Champion Windows	Salt Lake City			$\sqrt{}$		
Chris W. Thurgood Construction Inc.	Bothwell					
Chris-N-Win, Inc.	Sandy					
CJ's Home Improvement	West Valley City					
CK Construction & Roofing, Inc.	Pleasant View	$\sqrt{}$				
Clean Cut Glass	West Valley City			$\sqrt{}$		
Clear View Installs, LLC.	Sandy			$\sqrt{}$		
Cluff Building & Fencing LLC	Manti					$\sqrt{}$
Cool Covers	Ogden					$\sqrt{}$
Discount Windows	Sandy					$\sqrt{}$
Doc Oc Cleaner and Maintenance Services Inc.	Murray	$\sqrt{}$				
Double T, Inc.	Salt Lake City					
duplicate Affordable Insulation	West Jordan					
Eco Logic Design Build, Inc.	Moab	$\sqrt{}$				
Ecostar Insulation	Bountiful	$\sqrt{}$	$\sqrt{}$			
Element Construction, Inc.	Clinton					
Elite Energy Solutions	Lindon	V	√			
Empire Remodeling Co.	Salt Lake City	1	√			
Energy Pro	Syracuse	V	√			
Energy Savers Insulation	Layton	1	√			
Energy Wise Insulation	Salt Lake City	V	√			
ESCO Services	Salt Lake City					$\sqrt{}$

Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
Greenhome Specialties	Layton	$\sqrt{}$			$\sqrt{}$	
Greenify Energy Savers	Sandy			$\sqrt{}$		
Hansen All Seasons	Lindon	V				
Harley Construction Inc	American Fork					
Hilton Homeworks, Inc.	Riverton					$\sqrt{}$
Home Energy Experts	Clearfield					
Home Energy Services LLC	Salt Lake City					$\sqrt{}$
Home Energy Solutions	Centerville					$\sqrt{}$
Homestar Windows and Doors	Sandy					
Hone Insulation	Levan					
Housing Authority of Utah County	Provo					$\sqrt{}$
Humphrey Heating and Air	Bountiful					$\sqrt{}$
Imperial Window and Door	Cedar City			$\sqrt{}$		
Insulplus Insulation/Realticorp	Salt Lake City					$\sqrt{}$
Intermountain West Contractors	West Jordan					$\sqrt{}$
International Installations LLC	Lehi			$\sqrt{}$		
J & K Insulation LLC	PLEASANT VIEW		$\sqrt{}$			
J.R. Remodeling	West Jordan					
J.R. Remodeling Specialist	Draper		$\sqrt{}$			
Jake Steenbergen Construction, Inc.	Murray			$\sqrt{}$		
Jarrett Construction Inc	Orem			$\sqrt{}$		
Jones Paint & Glass	American Fork			$\sqrt{}$		
Jones Paint & Glass- Provo	Provo			$\sqrt{}$		
K & K Glass	Ogden			$\sqrt{}$		
K-Designers	West Valley City			V		
Kendall Insulation	Ogden	V	√			
L.J. Kaufman Construction	Salt Lake City					$\sqrt{}$
Larsen's Ace Hardware	Richfield	1				
LesCo Insulation	Kearns	V	V			

Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
LP Windows & Doors	St George					$\sqrt{}$
Midvalley Glass Co LLC	Sandy					
Miller's Northern Utah Glass	Logan					V
Morrison Insulation	St. George					
Mountain States Windows & Siding	Lehi					
Mountainland Exteriors	Riverton					
Moyes Glass and Supply	Ogden					
Mr. Window	Salt Lake City					
Nelson Insulation	Roy	V				
New Look Siding, LLC	Midvale					
North American Construction	Sandy					$\sqrt{}$
Northridge Window & Door	Layton			$\sqrt{}$		
Norton's Quality Exteriors	Midvale					√
Outwest Insulation	St. George					1
Pella Windows & Doors	Draper			$\sqrt{}$		
Penguin Insulation, LLC	Layton	$\sqrt{}$	√			
Philco Installation	West Jordan			$\sqrt{}$		
Phil's Glass Inc	Tooele					√
Powell's Pro	Sandy			$\sqrt{}$		
Precision Building, LLC	West Valley	$\sqrt{}$	$\sqrt{}$			
Premier Building Supply	American Fork				$\sqrt{}$	
Property Medics	Bluffdale	$\sqrt{}$				
Renewal by Andersen of Salt Lake	Salt Lake City					
Residential Glassworks	North Salt Lake			$\sqrt{}$		
Rick's Glass	Moab					V
RLA & Sons, LLC.	Draper	V				
Roberts Bros Inc	West Valley City			$\sqrt{}$		
Rocky Mountain Coating	Midvale					<b>V</b>
Rocky Mountain Windows and Doors Inc.	Orem					

Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
Roof Management Systems	Murray					V
Same Day Window, LLC.	American Fork			V		
Sanders Glass	Kaysville			<b>V</b>		
Savage Glass Co. Inc.	West Jordan					V
SB Window Sales LC	Salt Lake City			<b>V</b>		
Seal-Tech	Layton					V
Service Experts Heating & Air Conditioning	Ogden	√				
Service Experts of Salt Lake City	Midvale	V				
Service Experts of Utah - Provo	Midvale					V
Shep's Windows and Doors	Helper					
Six County Association of Governments	Richfield					V
Slade N Company	Salt Lake City					
Sloan Construction Corp.	Salt Lake City					$\sqrt{}$
Solar Window and Door	Salt Lake City			$\sqrt{}$		
Spartan Mechanical	South Ogden					$\sqrt{}$
Stratton Oakmont LLC	South Jordan	√				
Summit Insulation Inc.	West Valley					$\sqrt{}$
Sunroc Building Materials	Lindon	√	$\sqrt{}$			
Superior Home Improvement	South Salt Lake	√		$\sqrt{}$		
Tate's Construction Contracting Inc	West Valley City			$\sqrt{}$		
The Brokerage, Inc.	Salt Lake City			$\sqrt{}$		
Therma Glass Windows & Doors Inc.	Orem					
Thermal Solutions LLC	Springville	√	$\sqrt{}$			
Thurston Insulation	Garland					V
Tonks Insulation	Washington					V
Tubbs Glass	Roy					
U.N.I. Exteriors	Draper			$\sqrt{}$		
Uintah Basin Association of Governments	Roosevelt					V
United Subcontractors, Inc.	Salt Lake City	√	$\sqrt{}$	$\sqrt{}$		

Trade Ally	City	Insulation-Attic	Insulation-Wall	Windows	Insulation - Floor	No Redemptions in 2015
Unlimited Siding & Raingutter, Inc.	West Haven					$\sqrt{}$
USI Cardalls LLC	Logan	$\sqrt{}$	$\sqrt{}$			
Valley Glass Inc (Layton)	Layton			V		
Valley Glass Inc.	Ogden			V		
White Leaf Enterprises Inc	North Ogden			V		
Wholesale Windows and Door, Inc.	Orem			V		
Window World of Utah	Murray			1		V
Window World of Utah	Spanish Fork			1		
Wittes Fine Finish Work	Clearfield			1		

## Percentage of Applications by Category

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
ABRAHAM	0.00%	0.00%	0.00%	0.00%	0.00%
ALPINE	0.49%	0.28%	0.09%	0.05%	0.08%
ALTA	0.00%	0.00%	0.00%	0.00%	0.00%
AMALGA	0.01%	0.00%	0.00%	0.00%	0.00%
AMERICAN FORK	0.98%	0.43%	0.15%	0.11%	0.29%
ANETH	0.00%	0.00%	0.00%	0.00%	0.00%
ANNABELLA	0.06%	0.03%	0.02%	0.00%	0.01%
APPLE VALLEY	0.04%	0.00%	0.01%	0.01%	0.02%
AURORA	0.05%	0.03%	0.01%	0.00%	0.01%
AVON	0.02%	0.01%	0.00%	0.00%	0.00%
AXTELL	0.02%	0.01%	0.01%	0.00%	0.01%
BEAR RIVER CITY	0.03%	0.02%	0.00%	0.00%	0.01%
BEAVER	0.02%	0.01%	0.00%	0.00%	0.01%
BEAVER DAM	0.01%	0.00%	0.00%	0.00%	0.01%
BENJAMIN	0.03%	0.01%	0.01%	0.00%	0.01%
BENSON	0.01%	0.01%	0.00%	0.00%	0.00%
BIG COTTONWOOD CYN	0.00%	0.00%	0.00%	0.00%	0.00%
BINGHAM CANYON	0.00%	0.00%	0.00%	0.00%	0.00%
BIRDSEYE	0.00%	0.00%	0.00%	0.00%	0.00%
BLANDING	0.01%	0.00%	0.00%	0.00%	0.01%
BLUE CREEK	0.00%	0.00%	0.00%	0.00%	0.00%
BLUFF	0.01%	0.00%	0.00%	0.00%	0.00%
BLUFFDALE	0.50%	0.37%	0.04%	0.03%	0.07%
BOTHWELL	0.03%	0.02%	0.00%	0.00%	0.01%
BOUNTIFUL	0.61%	0.03%	0.56%	0.01%	0.01%
BRIAN HEAD	0.03%	0.01%	0.00%	0.00%	0.02%
BRIGHAM CITY	0.04%	0.02%	0.00%	0.00%	0.01%
BRIGHTON	0.01%	0.01%	0.00%	0.00%	0.00%
BROOKSIDE	0.03%	0.01%	0.01%	0.01%	0.01%
CACHE JUNCTION	0.00%	0.00%	0.00%	0.00%	0.00%
CASTLE DALE	0.03%	0.01%	0.00%	0.00%	0.02%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
CASTLE VALLEY	0.02%	0.00%	0.00%	0.00%	0.01%
CEDAR CITY	1.74%	0.42%	0.56%	0.11%	0.64%
CEDAR FORT	0.01%	0.01%	0.00%	0.00%	0.00%
CEDAR HILLS	0.48%	0.18%	0.03%	0.20%	0.07%
CENTERFIELD	0.05%	0.02%	0.02%	0.00%	0.01%
CENTERVILLE	1.05%	0.53%	0.20%	0.12%	0.21%
CENTRAL	0.04%	0.00%	0.01%	0.00%	0.03%
CENTRAL VALLEY	0.06%	0.03%	0.01%	0.00%	0.02%
CHESTER	0.02%	0.01%	0.00%	0.00%	0.01%
CIRCLEVILLE	0.02%	0.01%	0.01%	0.00%	0.00%
CLARKSTON	0.02%	0.01%	0.00%	0.00%	0.01%
CLAWSON	0.00%	0.00%	0.00%	0.00%	0.00%
CLEAR CREEK	0.01%	0.00%	0.00%	0.00%	0.01%
CLEARFIELD	0.93%	0.22%	0.34%	0.13%	0.24%
CLEVELAND	0.01%	0.01%	0.00%	0.00%	0.01%
CLINTON	0.88%	0.32%	0.20%	0.12%	0.24%
COALVILLE	0.03%	0.01%	0.00%	0.00%	0.01%
COLLEGE WARD	0.01%	0.00%	0.00%	0.00%	0.01%
COLLINSTON	0.01%	0.00%	0.00%	0.00%	0.00%
COLTON	0.00%	0.00%	0.00%	0.00%	0.00%
COPPERTON	0.03%	0.01%	0.01%	0.00%	0.01%
CORINNE	0.04%	0.01%	0.01%	0.00%	0.01%
CORNISH	0.02%	0.01%	0.00%	0.00%	0.01%
COTTONWOOD HEIGHTS	1.82%	0.89%	0.31%	0.23%	0.39%
COVE	0.02%	0.01%	0.00%	0.00%	0.01%
CROYDON	0.01%	0.01%	0.00%	0.00%	0.00%
DAMMERON VALLEY	0.09%	0.01%	0.03%	0.01%	0.04%
DELTA	0.18%	0.06%	0.02%	0.00%	0.10%
DESERET	0.02%	0.00%	0.00%	0.00%	0.01%
DEWEYVILLE	0.03%	0.01%	0.01%	0.00%	0.01%
DIAMOND VALLEY	0.21%	0.02%	0.09%	0.05%	0.05%
DRAPER	2.27%	0.99%	0.62%	0.34%	0.32%
EAGLE MOUNTAIN	3.14%	0.32%	1.64%	1.06%	0.13%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
EAST CARBON	0.04%	0.00%	0.00%	0.00%	0.03%
EDEN	0.12%	0.07%	0.01%	0.01%	0.03%
ELBERTA	0.00%	0.00%	0.00%	0.00%	0.00%
ELMO	0.01%	0.00%	0.00%	0.00%	0.01%
ELSINORE	0.06%	0.02%	0.04%	0.00%	0.01%
ELWOOD	0.04%	0.03%	0.00%	0.00%	0.01%
EMERY	0.01%	0.00%	0.00%	0.00%	0.00%
ENOCH	0.31%	0.09%	0.06%	0.02%	0.14%
ENTERPRISE	0.02%	0.01%	0.00%	0.00%	0.00%
EPHRAIM	0.01%	0.00%	0.00%	0.00%	0.00%
ERDA	0.09%	0.04%	0.02%	0.01%	0.02%
EUREKA	0.03%	0.01%	0.00%	0.00%	0.02%
FAIRFIELD	0.01%	0.00%	0.00%	0.00%	0.00%
FARMINGTON	1.16%	0.59%	0.21%	0.12%	0.23%
FARR WEST	0.45%	0.15%	0.07%	0.02%	0.21%
FAYETTE	0.03%	0.02%	0.01%	0.00%	0.01%
FERRON	0.05%	0.02%	0.01%	0.00%	0.02%
FIELDING	0.02%	0.01%	0.00%	0.00%	0.00%
FOUNTAIN GREEN	0.02%	0.01%	0.00%	0.00%	0.01%
FRANCIS	0.04%	0.03%	0.00%	0.00%	0.01%
FRUIT HEIGHTS	0.34%	0.19%	0.05%	0.03%	0.07%
GARDEN CITY	0.09%	0.03%	0.01%	0.00%	0.05%
GARLAND	0.08%	0.03%	0.01%	0.00%	0.04%
GENOLA	0.04%	0.03%	0.00%	0.00%	0.01%
GLENWOOD	0.03%	0.01%	0.02%	0.00%	0.01%
GOSHEN	0.02%	0.00%	0.01%	0.00%	0.01%
GRANTSVILLE	0.20%	0.09%	0.04%	0.00%	0.07%
GREEN RIVER	0.02%	0.00%	0.00%	0.00%	0.02%
GREENVILLE	0.00%	0.00%	0.00%	0.00%	0.00%
GUNLOCK	0.05%	0.00%	0.02%	0.02%	0.00%
GUNNISON	0.07%	0.02%	0.02%	0.00%	0.03%
HARRISVILLE	0.31%	0.08%	0.06%	0.02%	0.15%
HEBER CITY	0.02%	0.02%	0.00%	0.00%	0.00%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
HELPER	0.03%	0.01%	0.00%	0.00%	0.03%
HENEFER	0.04%	0.02%	0.01%	0.00%	0.01%
HERRIMAN	1.49%	0.96%	0.18%	0.08%	0.27%
HIDEOUT	0.35%	0.00%	0.34%	0.00%	0.00%
HIGHLAND	0.75%	0.37%	0.06%	0.20%	0.12%
HINCKLEY	0.02%	0.00%	0.01%	0.00%	0.00%
HOLDEN	0.01%	0.00%	0.00%	0.00%	0.00%
HOLLADAY	1.62%	0.85%	0.32%	0.14%	0.30%
HONEYVILLE	0.04%	0.03%	0.00%	0.00%	0.01%
HOOPER	0.40%	0.21%	0.06%	0.05%	0.08%
HOWELL	0.01%	0.00%	0.00%	0.00%	0.01%
HOYTSVILLE	0.01%	0.01%	0.00%	0.00%	0.01%
HUNTINGTON	0.07%	0.01%	0.01%	0.00%	0.05%
HUNTSVILLE	0.14%	0.09%	0.01%	0.01%	0.03%
HURRICANE	0.04%	0.01%	0.00%	0.00%	0.03%
HYDE PARK	0.19%	0.13%	0.01%	0.01%	0.05%
HYRUM	0.01%	0.00%	0.00%	0.00%	0.00%
INDIANOLA	0.00%	0.00%	0.00%	0.00%	0.00%
IVINS	1.39%	0.07%	0.86%	0.30%	0.16%
JOSEPH	0.04%	0.01%	0.01%	0.00%	0.01%
JUNCTION	0.01%	0.00%	0.00%	0.00%	0.01%
KAMAS	0.13%	0.07%	0.01%	0.00%	0.05%
KANARRAVILLE	0.03%	0.02%	0.01%	0.00%	0.00%
KAYSVILLE	0.04%	0.02%	0.01%	0.00%	0.01%
KEARNS	0.81%	0.13%	0.30%	0.07%	0.30%
KENILWORTH	0.01%	0.00%	0.00%	0.00%	0.00%
KINGSTON	0.00%	0.00%	0.00%	0.00%	0.00%
LA SAL	0.01%	0.00%	0.00%	0.00%	0.01%
LA VERKIN	0.63%	0.02%	0.33%	0.15%	0.13%
LAKE POINT	0.02%	0.01%	0.01%	0.00%	0.01%
LAKETOWN	0.02%	0.01%	0.00%	0.00%	0.01%
LAYTON	3.27%	1.34%	0.96%	0.26%	0.71%
LEAMINGTON	0.01%	0.00%	0.00%	0.00%	0.01%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
LEEDS	0.12%	0.02%	0.05%	0.03%	0.03%
LEHI	0.03%	0.02%	0.00%	0.00%	0.01%
LEVAN	0.01%	0.00%	0.01%	0.00%	0.00%
LEWISTON	0.09%	0.05%	0.00%	0.00%	0.04%
LIBERTY	0.08%	0.06%	0.00%	0.00%	0.02%
LINCOLN	0.01%	0.01%	0.00%	0.00%	0.01%
LINDON	0.51%	0.30%	0.10%	0.02%	0.09%
LOGAN	0.04%	0.01%	0.00%	0.00%	0.03%
LYNNDYL	0.01%	0.01%	0.00%	0.00%	0.00%
MAGNA	0.62%	0.14%	0.21%	0.04%	0.23%
MALAD	0.00%	0.00%	0.00%	0.00%	0.00%
MAMMOTH	0.01%	0.00%	0.00%	0.00%	0.01%
MANDERFIELD	0.00%	0.00%	0.00%	0.00%	0.00%
MANTI	0.00%	0.00%	0.00%	0.00%	0.00%
MANTUA	0.06%	0.04%	0.01%	0.00%	0.02%
MAPLETON	0.36%	0.19%	0.04%	0.02%	0.10%
MARRIOTT SLATERVILLE	0.07%	0.01%	0.00%	0.01%	0.06%
MARRIOTT-SLATERVILLE	0.04%	0.01%	0.01%	0.02%	0.00%
MARYSVALE	0.04%	0.01%	0.01%	0.00%	0.02%
MAYFIELD	0.02%	0.01%	0.01%	0.01%	0.00%
MENDON	0.09%	0.07%	0.01%	0.00%	0.02%
MIDVALE	1.96%	0.29%	1.02%	0.11%	0.54%
MIDWAY	0.00%	0.00%	0.00%	0.00%	0.00%
MILFORD	0.03%	0.01%	0.00%	0.01%	0.01%
MILLCREEK CANYON	0.01%	0.00%	0.00%	0.00%	0.00%
MILLVILLE	0.08%	0.04%	0.01%	0.00%	0.03%
MINERSVILLE	0.02%	0.01%	0.00%	0.00%	0.01%
MOAB	0.31%	0.02%	0.03%	0.00%	0.26%
MONA	0.05%	0.03%	0.00%	0.00%	0.02%
MONROE	0.03%	0.00%	0.02%	0.00%	0.02%
MONTEZUMA CREEK	0.00%	0.00%	0.00%	0.00%	0.00%
MORGAN	0.16%	0.10%	0.02%	0.01%	0.03%
MORONI	0.02%	0.00%	0.00%	0.00%	0.02%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
MOUNTAIN GREEN	0.21%	0.14%	0.02%	0.01%	0.04%
MT PLEASANT	0.02%	0.01%	0.00%	0.00%	0.01%
MURRAY	0.70%	0.28%	0.18%	0.06%	0.18%
NAPLES	0.04%	0.01%	0.00%	0.00%	0.03%
NEPHI	0.01%	0.00%	0.00%	0.00%	0.00%
NEW HARMONY	0.05%	0.01%	0.02%	0.00%	0.01%
NEWTON	0.03%	0.01%	0.00%	0.00%	0.02%
NIBLEY	0.29%	0.14%	0.00%	0.00%	0.15%
NORTH LOGAN	0.77%	0.23%	0.06%	0.02%	0.46%
NORTH OGDEN	0.90%	0.33%	0.24%	0.10%	0.23%
NORTH SALT LAKE	1.19%	0.30%	0.61%	0.06%	0.21%
OAK CITY	0.00%	0.00%	0.00%	0.00%	0.00%
OAKLEY	0.08%	0.05%	0.00%	0.00%	0.02%
OASIS	0.00%	0.00%	0.00%	0.00%	0.00%
OGDEN	3.37%	0.76%	1.04%	0.33%	1.24%
OPHIR	0.00%	0.00%	0.00%	0.00%	0.00%
ORANGEVILLE	0.03%	0.02%	0.00%	0.00%	0.01%
OREM	3.18%	1.19%	0.54%	0.30%	1.15%
PANGUITCH	0.08%	0.01%	0.01%	0.00%	0.06%
PARADISE	0.07%	0.05%	0.00%	0.00%	0.02%
PARK CITY	0.83%	0.54%	0.08%	0.02%	0.20%
PARLEYS CANYON	0.01%	0.00%	0.00%	0.00%	0.00%
PAROWAN	0.00%	0.00%	0.00%	0.00%	0.00%
PEOA	0.01%	0.01%	0.00%	0.00%	0.00%
PERRY	0.19%	0.11%	0.02%	0.01%	0.06%
PETERSBORO	0.01%	0.01%	0.00%	0.00%	0.00%
PLAIN CITY	0.51%	0.18%	0.09%	0.04%	0.19%
PLEASANT GROVE	1.31%	0.58%	0.34%	0.11%	0.29%
PLEASANT VIEW	0.53%	0.24%	0.10%	0.06%	0.13%
PLYMOUTH	0.01%	0.01%	0.00%	0.00%	0.01%
PORTAGE	0.01%	0.00%	0.00%	0.00%	0.01%
PRICE	0.20%	0.05%	0.00%	0.01%	0.14%
PROVIDENCE	0.33%	0.23%	0.01%	0.02%	0.07%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
PROVO	0.00%	0.00%	0.00%	0.00%	0.00%
PROVO CANYON	0.02%	0.01%	0.00%	0.00%	0.01%
RANDOLPH	0.01%	0.00%	0.00%	0.00%	0.01%
REDMOND	0.03%	0.00%	0.01%	0.00%	0.01%
RICHFIELD	0.55%	0.13%	0.19%	0.00%	0.22%
RICHMOND	0.11%	0.06%	0.00%	0.00%	0.05%
RIVER HEIGHTS	0.11%	0.06%	0.00%	0.01%	0.05%
RIVERDALE	0.35%	0.13%	0.12%	0.03%	0.07%
RIVERSIDE	0.01%	0.00%	0.00%	0.00%	0.00%
RIVERTON	1.83%	0.99%	0.31%	0.16%	0.38%
ROCKVILLE	0.04%	0.01%	0.01%	0.01%	0.01%
ROCKY RIDGE	0.01%	0.01%	0.00%	0.00%	0.00%
ROY	1.50%	0.50%	0.39%	0.14%	0.47%
RUSH VALLEY	0.02%	0.01%	0.00%	0.00%	0.01%
SALINA	0.14%	0.04%	0.04%	0.00%	0.06%
SALT LAKE CITY	9.30%	3.17%	2.60%	0.99%	2.53%
SANDY	5.10%	2.29%	1.17%	0.63%	1.01%
SANTAAQUIN	0.00%	0.00%	0.00%	0.00%	0.00%
SANTAQUIN	0.20%	0.10%	0.01%	0.01%	0.09%
SARATOGA SPRINGS	1.39%	0.55%	0.36%	0.27%	0.20%
SCIPIO	0.01%	0.00%	0.00%	0.00%	0.01%
SCOFIELD	0.03%	0.00%	0.00%	0.00%	0.02%
SEVIER	0.02%	0.00%	0.01%	0.00%	0.01%
SIGURD	0.02%	0.00%	0.02%	0.00%	0.00%
SMITHFIELD	0.38%	0.23%	0.02%	0.01%	0.13%
SNOWVILLE	0.01%	0.01%	0.00%	0.00%	0.00%
SNYDERVILLE	0.16%	0.11%	0.01%	0.00%	0.03%
SOLDIER SUMMIT	0.00%	0.00%	0.00%	0.00%	0.00%
SOUTH JORDAN	7.78%	1.43%	5.40%	0.35%	0.59%
SOUTH OGDEN	0.68%	0.23%	0.18%	0.07%	0.20%
SOUTH SALT LAKE	0.67%	0.14%	0.27%	0.05%	0.22%
SOUTH WEBER	0.33%	0.20%	0.04%	0.03%	0.06%
SPRING CITY	0.01%	0.00%	0.00%	0.00%	0.01%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
SPRING GLEN	0.05%	0.02%	0.00%	0.00%	0.03%
SPRINGDALE	0.02%	0.01%	0.00%	0.01%	0.01%
SSALT LAKE CITY	0.01%	0.00%	0.01%	0.00%	0.00%
STANSBURY PARK	0.31%	0.12%	0.09%	0.02%	0.08%
STERLING	0.01%	0.01%	0.00%	0.00%	0.01%
STOCKTON	0.02%	0.01%	0.00%	0.00%	0.00%
SUMMIT	0.01%	0.00%	0.00%	0.00%	0.01%
SUMMIT COUNTY	0.13%	0.08%	0.00%	0.00%	0.05%
SUNSET	0.19%	0.05%	0.06%	0.03%	0.05%
SUTHERLAND	0.04%	0.02%	0.01%	0.00%	0.01%
SYRACUSE	1.19%	0.64%	0.22%	0.09%	0.24%
TAYLOR	0.10%	0.02%	0.01%	0.01%	0.06%
TAYLORSVILLE	1.99%	0.62%	0.54%	0.22%	0.61%
TERRA	0.00%	0.00%	0.00%	0.00%	0.00%
THATCHER	0.01%	0.00%	0.00%	0.00%	0.01%
TOOELE	0.72%	0.24%	0.18%	0.03%	0.27%
TOQUERVILLE	0.15%	0.02%	0.10%	0.01%	0.03%
TREMONTON	0.33%	0.16%	0.02%	0.01%	0.14%
TRENTON	0.03%	0.00%	0.01%	0.00%	0.01%
UINTAH	0.13%	0.07%	0.02%	0.01%	0.03%
UPTON	0.00%	0.00%	0.00%	0.00%	0.00%
VENICE	0.02%	0.00%	0.00%	0.00%	0.01%
VERNAL	1.06%	0.12%	0.05%	0.01%	0.89%
VERNON	0.01%	0.00%	0.00%	0.00%	0.01%
VEYO	0.03%	0.00%	0.02%	0.00%	0.01%
VINEYARD	0.15%	0.06%	0.05%	0.03%	0.01%
VIRGIN	0.03%	0.00%	0.01%	0.00%	0.02%
WALES	0.02%	0.01%	0.00%	0.00%	0.01%
WALLSBURG	0.03%	0.02%	0.00%	0.00%	0.00%
WANSHIP	0.02%	0.02%	0.00%	0.00%	0.00%
WASATCH COUNTY	0.03%	0.02%	0.00%	0.00%	0.01%
WASHINGTON TERRACE	0.39%	0.13%	0.10%	0.05%	0.10%
WEBER CANYON	0.01%	0.00%	0.00%	0.00%	0.01%

Customer City	% of All Applications	% of Appliance & Fixture Applications	% of HVAC Applications	% of Weatherization Applications	% of Kits Applications
WELLINGTON	0.04%	0.01%	0.00%	0.00%	0.03%
WELLSVILLE	0.19%	0.11%	0.00%	0.01%	0.07%
WEST BOUNTIFUL	0.25%	0.15%	0.02%	0.03%	0.05%
WEST HAVEN	0.61%	0.25%	0.08%	0.04%	0.23%
WEST JORDAN	4.29%	1.28%	1.43%	0.39%	1.19%
WEST POINT	0.51%	0.25%	0.07%	0.08%	0.12%
WEST VALLEY	0.09%	0.00%	0.09%	0.00%	0.00%
WEST VALLEY CITY	3.46%	0.68%	1.26%	0.32%	1.19%
WEST WEBER	0.05%	0.02%	0.01%	0.00%	0.02%
WILLARD	0.17%	0.09%	0.02%	0.01%	0.05%
WINCHESTER HILLS	0.28%	0.01%	0.14%	0.09%	0.04%
WOODRUFF	0.00%	0.00%	0.00%	0.00%	0.00%
WOODS CROSS	0.46%	0.21%	0.09%	0.04%	0.13%
YOUNG WARD	0.01%	0.00%	0.00%	0.00%	0.01%
ZION NATIONAL PARK	0.00%	0.00%	0.00%	0.00%	0.00%



# Appendix 5

# Utah Program Evaluation Recommendations and Responses

### **Utah 2015 Program Evaluations**

#### **Program Evaluation Recommendations and Company Responses**

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

Outlined below is a list of the programs, the years that were evaluated during 2015 and the third party evaluator who completed the evaluation. Program evaluations are available for review at <a href="https://www.pacificorp.com/es/dsm/utah.html">www.pacificorp.com/es/dsm/utah.html</a>

**Table 1 – Program Evaluations** 

Program / Activities	Years Evaluated	Evaluator	Progress Status
FinAnswer Express	2012 – 2013	Navigant Consulting	Completed
Energy FinAnswer	2012 – 2013	Navigant Consulting	Completed
Recommissioning	2012 – 2013	Navigant Consulting	Completed
Self-Direction	2012 – 2013	Navigant Consulting	Completed
Home Energy Savings	2013 – 2014	The Cadmus Group	In progress
Home Energy Reports	8/1/2012 - 1/31/2014	Navigant Consulting	In progress
Refrigerator Recycling	2013 - 2014	The Cadmus Group	Completed Q1 2016

The third party evaluator's recommendations and Company's responses are provided in the below Tables:

**Table 2 – Energy FinAnswer Evaluation Recommendations** 

Table 2 – Energy Finanswer Evaluation Recommendations				
Evaluation Recommendations	Rocky Mountain Power Action Plan			
Leverage available marketing channels to improve program awareness. Nearly half of the interviewed participants learned of the program through prior projects (28%) or through program staff referrals (20%).	Through the <i>watt</i> smart Business Program, RMP has included face to face interactions, industry association interaction, improved collateral material and specific targeting of high-intensity energy use marketing segments. RMP is completing a Comprehensive Web and Mobile Strategy which aims to improve customer interaction through digital platforms.			
Ensure measure classifications in database are correct.	RMP has implemented its Technical Resource Library (TRL) and DSM Central (DSMC) software. These two applications assist in providing the administrative checks and balances to manage measure classification.			
Detailed baseline and measure information should be included in all project files. Most files contained this information, but some were missing important measure specific details.	DSMC allows attachment of project documentation to show achieved savings. RMP process now requires all project documentation be zipped and attached to the project within the database before closing a project and seeking cost recovery.			

**Table 3 – FinAnswer Express Evaluation Recommendations** 

<b>Evaluation Recommendations</b>	Rocky Mountain Power Action Plan
Review procedure for determining claimed hours of use for lighting projects with savings above 200,000 kWh.	A table of Hours of Reasonable Operation has been created for all lighting auditors, providing guidelines of reasonableness based upon lighted space types. Additionally, RMP has increased trainings on pertinent lighting tools (in-person trainings and webinars).
When entering lighting project details into the program tracking database, use measure sub-types that allow for greater resolution in the application of effective useful life (EUL) values.	RMP has implemented its TRL and DSMC software following Navigant's evaluation. The TRL breaks out lighting measures into subtypes within the database and provides the ability to assign them an individual EUL
Use greater resolution in the application of EUL values in the program tracking database.	RMP has implemented recommended changes due to the TRL and DSMC.
Review and enhance the usability of the website.	RMP recently completed a web usability study and is in the final stages of completing its Comprehensive Web and Mobile Strategy. This strategy aims to provide a working plan of improvement to customer interaction through digital platforms.

**Table 4 – Recommissioning Evaluation Recommendations** 

<b>Evaluation Recommendations</b>	Rocky Mountain Power Action Plan			
Account for kW demand savings on all applicable projects.	The kW savings is now tracked for projects that produce quantifiable kW savings.			
Improve customer communications. Both near-participants interviewed felt they were dropped or canceled due to errors made by utility.	RMP has acted to improve customer communication through the implementation of a single, general application for Energy Management and the introduction of new delivery channel partners, to help manage communications among unmanaged accounts. This should limit or reduce project cancellation errors in the future.			

**Table 5 – Self-Direction Evaluation Recommendations** 

<b>Evaluation Recommendations</b>	Rocky Mountain Power Action Plan
Ensure measure classifications in database are correct.	RMP has implemented its TRL and DSMC software. These two applications assist in providing the administrative checks and balances to manage measure classification.



# Appendix 6 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.

#### Search Criteria:

Selected State(s): Utah
Specialties: Lightin

Lighting
HVAC - unitary
HVAC - evaporative
Motors and VFDs
Controls
Building envelope
Appliances
Office Equipment
Food Service
Compressed Air
Farm and Dairy
Irrigation
Other

Business Type: --ANY--

#### Search Results: 271 - Date and Time: 03/10/2016 02:51:31 PM

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	<b>Join Date</b> 02/15/2016	Projects Completed
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
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
Layton Sales Agency 4404 W. 2100 S. Salt Lake City, UT - 84120 Phone: 801-973-8100 Website: laytonsales.com	Specialties Lighting	Business Type Manufacturer - Rep	Join Date 02/10/2007	Projects Completed
Burton Electric, Inc.  8805 South 1300 West West Jordan, UT - 84088 Phone: 801-450-1201	Specialties Lighting	Business Type Contractor	Join Date 08/23/2006	Projects Completed 18
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
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



Lennox	Specialties HVAC - unitary	Business Type Distributor	Join Date 11/01/2005	Projects Completed
1008 W 2780 S Salt Lake City, UT - 84119 Phone: 801-556-6114 Website: lennoxcommercial.com	HVAC - unitary	Distributor	11/01/2005	Completed
Commercial Mechanical Systems & Service	Specialties HVAC - unitary	Business Type Contractor	Join Date 02/01/2012	Projects Completed
3395 West 1820 South Salt Lake City, UT - 84104 Phone: 801-977-3925 Website: cmsutah.com	Motors and VFDs Other: Other Specialty			
<b>Crescent Electric Supply Company - Orem</b>	Specialties Lighting	Business Type Distributor	Join Date 08/15/2013	Projects Completed
1490 West 105 North Orem, UT - 84057 Phone: 801-224-3355				·
Electrical Wholesale Supply - Logan, UT	Specialties Lighting	Business Type Distributor	Join Date 03/11/2011	Projects Completed
1651 North 1000 West Logan, UT - 84321 Phone: 435-774-8800 Website: ewsutah.com				5
Meyer Lighting & Supply LLC	Specialties Lighting	Business Type Distributor	Join Date 03/06/2006	Projects Completed
1192 Draper Parkway #212 Draper, UT - 84020 Phone: 801-523-3980	Lighting	Distributor	03/00/2000	61
Contractors HVAC Supply	Specialties HVAC - unitary	Business Type Distributor	Join Date 07/01/2010	Projects Completed
3145 S. Washington Street Salt Lake City, UT - 84115 Phone: 801-487-8565 Website: contractorshvacsupply.com	Tivic unital,	Distribution	07/01/2010	Completed
Zeus Electric, LLC	Specialties Building envelope	Business Type Contractor	Join Date 01/15/2016	Projects Completed
5526 W 13400 S #314 Herriman, UT - 84096 Phone: 801-541-8468	Lighting	Contractor	0 1/ 10/2010	Completed
Precision Air Management, LLC	Specialties Controls	Business Type Contractor	Join Date 11/24/2015	Projects Completed
1388 South 350 West Lehi, UT - 84043 Phone: 801-360-1848 Website: precisionairmgmt.com	HVAC - unitary Motors and VFDs Office Equipment			
Catalyst LED Lighting Solutions	Specialties Lighting	Business Type Distributor	Join Date 05/01/2014	Projects Completed
5936 N 16th St Dalton Gardens, ID - 83815 Phone: 480-789-3773 Website: http://www.catalystleds.com	Lighting	Manufacturer - Rep	03/01/2014	Completed
Royal Wholesale Electric - Salt Lake City	Specialties Lighting	Business Type Distributor	Join Date 06/09/2007	Projects Completed
3100 So. 900 W. Salt Lake City, UT - 84119 Phone: 801-973-6000				2
Hedgehog Electric	Specialties Lighting	Business Type Contractor	Join Date 09/10/2012	Projects Completed
14553 South 790 West Suite C Bluffdale, UT - 84065 Phone: 801-870-6986 Website: hedgehogelectric.com	<del></del>	_ 5	33, 3,2012	1
ESL Vision LLC	Specialties Controls	Business Type Distributor	Join Date 01/13/2013	Projects Completed
391 Lawndale Dr Salt Lake City, UT - 84115 Phone: 801-415-5177 Website: www.eslvision.com	Lighting	Manufacturer - Rep	1-2	



Intertech Communications Electric, Inc.	Specialties Lighting	Business Type Contractor	Join Date 01/21/2013	Projects Completed
756 South Main Suite A Brigham City, UT - 84302 Phone: 435-723-7165				
Cutler Electric Inc.	Specialties	Business Type	Join Date	Projects
1417 East 150 South Springville, UT - 84663 Phone: 801-489-1351	Lighting Motors and VFDs	Contractor	02/12/2015	Completed
Bleu Skye, LLC	Specialties Controls	Business Type	Join Date 07/24/2014	Projects
1901 Ryan Park Ave Sandy, UT - 84092 Phone: 801-557-1800 Website: www.bleuskyeservices.com	Lighting	Contractor	07/24/2014	Completed
<b>Green Creative LLC</b>	Specialties	Business Type	Join Date	Projects
533 Airport Blvd., Suite 212 Burlingame, CA - 94010 Phone: 866-774-5433 Website: www.gc-lighting.com	Lighting	Manufacturer - Rep	06/25/2013	Completed
Ace Electrical, Inc	Specialties Controls	Business Type Contractor	Join Date 02/11/2013	Projects Completed
3575 South West Temple Suite 7, Salt L:ake City, UT - 84115 Phone: 801-266-3848 Website: www.ace-electrical.com	Lighting Motors and VFDs	Contractor	02/11/2013	Completed
Gray Wolf Mechanical LLC	Specialties	Business Type	Join Date	Projects
P.O. Box 505 Provo, UT - 84603 Phone: 801-805-6531 Website: Graywolfair.com	HVAC - evaporative HVAC - unitary	Contractor	11/12/2015	Completed
Salt Lake Winlectric	Specialties	Business Type	Join Date	Projects
6120 South 300 West Murray, UT - 84107 Phone: 801-293-1600 Website: www.slcwinlectric.com	Lighting	Distributor	09/03/2013	Completed 5
Red Peak Electric, Inc.	Specialties	Business Type	Join Date	Projects
9526 Chavez Dr. South Jordan, UT - 84095 Phone: 801-330-3575	Lighting	Contractor	07/01/2005	Completed 2
TreeFrog LED, Inc.	Specialties Lighting	Business Type Distributor	Join Date 07/29/2013	Projects Completed
7594 North Swansea Court Eagle Mountain, UT - 84005 Phone: 801-372-8720 Website: www.treefrogled.com	Lighting	Distributor	0772372013	Completed
Allred's Incorporated - Logan	Specialties HVAC - unitary	Business Type Distributor	Join Date 05/11/2011	Projects Completed
642 North 1000 West Unit # 104 Logan, UT - 84321 Phone: 435-774-1200 Website: www.allreds.net	HVAC - unitary	Distributor	03/11/2011	Completed
All Electric Plus, Inc.	Specialties Controls	Business Type Distributor	Join Date 11/03/2014	Projects Completed
182 S. 200 West Paragonah, UT - 94160 Phone: 435-477-9591 Website: www.allelectricplus.com	Farm and Dairy Irrigation Lighting Motors and VFDs	DistributOl	11/03/2014	Completed
Electrical Wholesale Supply - Layton		Business Type Distributor	Join Date 04/25/2013	Projects Completed
600 North 630 West Layton, UT - 84041 Phone: 801-544-1206 Website: www.ewsutah.com	Controls Lighting Motors and VFDs	Distributor	04/23/2013	Completed 8



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
Rocky Mountain LED Supply 2178 E. Tuscany Creek Way Draper, UT - 84020 Phone: 801-553-8178	Specialties Lighting	<b>Business Type</b> Distributor Manufacturer - Rep	Join Date 04/13/2015	Projects Completed 57
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
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
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
Johnson Powers, LLC 8704 South 120 East Sandy, UT - 84070 Phone: 801-878-7831 Website: www.johnsonpowers.com	Specialties Appliances Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Business Type Contractor	Join Date 07/23/2014	Projects Completed
Candle3 LLC 6385 Corporate Dr. Colorado Springs, CO - 80919 Phone: 719-930-9099 Website: www.candle3.com	Specialties Controls Lighting	Business Type Distributor Manufacturer - Rep	Join Date 11/21/2014	Projects Completed
Navigant Marketing DBA Global Tech LED  15015 Juniper Ct. Golden, CO - 80401 Phone: 303-278-8308 Website: www.globaltechled.com	Specialties Lighting	Business Type Manufacturer - Rep	<b>Join Date</b> 04/18/2013	Projects Completed
Johnson Controls, Inc. 2255 Technology Parkway West Valley City, UT - 84119 Phone: 801-946-4059	Specialties Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Business Type Contractor Manufacturer - Rep	Join Date 06/01/2007	Projects Completed
Bateman-Hall, Inc.  1405 Foote Drive Idaho Falls, ID - 83402 Phone: 208-523-2681 Website: www.bateman-hall.com	Specialties Other: Other Specialty	Business Type Contractor	Join Date 02/18/2014	Projects Completed
D & A Johnson Electric, Inc. 8 South Angel Street Kaysville, UT - 84037 Phone: 801-593-9559	Specialties Appliances Lighting Office Equipment	Business Type Contractor	Join Date 05/14/2015	Projects Completed
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



Arco Electric, Inc Utah	Specialties Lighting	Business Type Contractor	Join Date 09/21/2012	Projects Completed
597 West 9320 South Sandy, UT - 84070 Phone: 801-566-1695	Lighting	Contractor	03/21/2012	1
Energy Planning Associates, Inc (DBA) Envirobrite	Specialties Lighting	Business Type Manufacturer - Rep	Join Date 07/24/2015	Projects Completed
148 Maritime Dr Sanford, FL - 32771 Phone: 407-302-0001 Website: www.envirobrite.net				
Electrical Marketing Solutions (DBA) EMS	Controls	Business Type Manufacturer - Rep	Join Date 12/31/2014	Projects Completed
2139 S West Temple Salt Lake City, UT - 84115 Phone: 801-869-1445 Website: http://emsreps.com/	Lighting			1
Lynn Woodward Electric LLC	Specialties Lighting	Business Type Contractor	Join Date 06/01/2007	Projects Completed
3336 So. 1325 W. Ogden, UT - 84401 Phone: 801-621-3220 Website: Iwe-Ilc.com				22
SuperGreen Solutions	Specialties Controls	Business Type Distributor	Join Date 08/26/2015	Projects Completed
2682 S. Highland Dr. Ste 103 SALT LAKE CITY, UT - 84106 Phone: 801-953-1096 Website: www.supergreensolutions.com	Lighting			8
Compressor-Pump & Service, Inc.	Specialties Motors and VFDs	Business Type Distributor	Join Date 09/01/2005	Projects Completed
3333 W 2400 S Salt Lake City, UT - 84119 Phone: 801-973-0154 Website: compressor-pump.com		Manufacturer - Rep		Completed
All American LED, LLC	Specialties Lighting	Business Type Distributor	Join Date 12/18/2012	Projects Completed
3234 E 4650 N Liberty, UT - 84310 Phone: 801-920-7276 Website: www.All-AmericanLED.com				33
JRW & Associates, PLLC	Specialties Building envelope	Business Type Architect	Join Date 10/21/2013	Projects Completed
1152 Bond Ave Rexburg, ID - 83440 Phone: 208-359-2309				
Skyline Electric Company	Specialties Lighting	Business Type Contractor	Join Date 12/02/2002	Projects Completed
1848 W 2300 S West Valley City, UT - 84119 Phone: 801-972-3656 Website: skyline-electric.com				23
YESCO -Young Electric Sign Company - Logan, UT	Specialties Lighting	Business Type Contractor	Join Date 04/07/2007	Projects Completed
1651 North 1000 West Logan, UT - 84321 Phone: 435-774-8800 Website: yesco.com		Distributor		24
Royal Wholesale Electric - Orem	Specialties Lighting	Business Type Distributor	Join Date 09/22/2012	Projects Completed
21 S 1500 W Orem, UT - 84058 Phone: 801-224-5555 Website: www.royalutah.com				2
Taylor Electric, Inc.	Specialties Lighting	Business Type Contractor	Join Date 04/28/2007	Projects Completed
1018 W Beardsley Pl. Salt Lake City, UT - 84119 Phone: 801-413-1376				16



Freedom Lighting	Specialties	Business Type	Join Date	Projects
4967 Wallace Lane Holladay, UT - 84117 Phone: 801-859-7943	Lighting	Distributor	05/16/2008	Completed 11
JSR Services, LLC.	Specialties	Business Type	Join Date	Projects
95 East Fort Union Blvd Midvale, UT - 84047 Phone: 801-748-1764 Website: www.jsrservices.com	Building envelope	Engineering Firm Other: Roofing & Envelope Consultant	05/08/2014	Completed
Home Energy Solutions	Specialties Building envelope	Business Type Contractor	Join Date 11/13/2013	Projects Completed
625 N 1250 W Suite 1, Centerville, UT - 84014 Phone: 801-230-8453	Building crivelope	Contractor	11/13/2013	Completed
Felt Lighting Inc.	Specialties	Business Type	Join Date	Projects
1220 East 3300 South Salt Lake City, UT - 84106 Phone: 801-484-8571 Website: www.feltlighting.com	Controls Lighting	Distributor	11/27/2013	Completed 1
SUMMA Energy Services	Specialties HVAC - unitary	Business Type Other	Join Date 01/01/2009	Projects Completed
250 N 200 W Hyrum, UT - 84319 Phone: 435-245-6120 Website: summaenergy.com	Motors and VFDs Other: Other Specialty		0 1/0 1/2000	Completed
Graybar Electric Company - Salt Lake City	Specialties Lighting	Business Type Distributor	Join Date 05/30/2005	Projects Completed 37
2841 So. 900 W. Salt Lake City, UT - 84119 Phone: 801-975-1115 Website: graybar.com				
Light Energy Development LLC	Specialties Lighting	Business Type Other	Join Date 07/23/2013	Projects
41 North Rio Grande Salt Lake City, UT - 84101 Phone: 801-456-3910 Website: www.lightenergydevelopment.net	Lighting	Cities	01/23/2013	Completed 35
Hunt Electric, Inc.	Specialties	Business Type	Join Date	Projects
1863 West Alexander Street Salt Lake City, UT - 84119 Phone: 801-975-8844	Lighting	Contractor	08/05/2005	Completed 30
Express Lighting LLC	Specialties Lighting	Business Type Distributor	Join Date 12/01/2015	Projects Completed
7050 South State Street Midvale, UT - 84047 Phone: 801-617-1133 Website: www.express.lighting	Lighting	Manufacturer - Rep	12/01/2010	Completed
Advanced Lighting, Inc Utah	Specialties	Business Type Contractor	Join Date	Projects
3099 south 1030 west Salt Lake City, UT - 84119 Phone: 801-972-9530 Website: www.advlight.com	Lighting	Connactor	07/04/2004	Completed 345
Rydalch Electric	Specialties	Business Type	Join Date	Projects
250 W. Plymouth Ave. Salt Lake City, UT - 84115 Phone: 801-265-1813 Website: www.rydalch-electric.com	Lighting	Contractor	07/04/2004	Completed 16
Sammy's Heating and Air	<b>Specialties</b> HVAC - evaporative	Business Type Contractor	Join Date 11/02/2015	Projects Completed
935 E. 1150 N. Bountiful, UT - 84010 Phone: 801-698-0096 Website: sammyshvac.com	HVAC - unitary Motors and VFDs	2223.0		- Simpletou



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	<b>Join Date</b> 07/28/2015	Projects Completed
The Light Source  355 East 2100 S Salt Lake City, UT - 84115 Phone: 801-487-2020 Website: tlsource.com	<b>Specialties</b> Controls Lighting	Business Type Manufacturer - Rep	Join Date 03/04/2004	Projects Completed 7
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
LMS - Lighting Maintenance Service - Utah*  663 West 4330 South Salt Lake City, UT - 84123 Phone: 801-281-0400 Website: Imslighting.com	Specialties Controls Lighting Motors and VFDs	Business Type Contractor	Join Date 10/02/2002	Projects Completed 477
Vibrant  619 S Bluff St #401 St George, UT - 84770 Phone: 702-701-2450 Website: vibrantenergygroup.com	<b>Specialties</b> Lighting	Business Type Distributor Manufacturer - Rep Other: consulting, sales	Join Date 01/15/2015	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	<b>Join Date</b> 02/14/2013	Projects Completed 2
Loeb Lighting Services 1800 E 5th Ave Columbia, OH - 43219 Phone: 800-866-5616	Specialties Controls Lighting	Business Type Distributor	Join Date 03/16/2015	Projects Completed
Mark Clary 2302 West 8540 South West Jordan, UT - 84088 Phone: 801-233-0882	<b>Specialties</b> Lighting	Business Type Architect	Join Date 08/08/2013	Projects Completed
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	<b>Join Date</b> 07/01/2011	Projects Completed 7
LDP Associates Inc.  3908 Smith Ranch Rd Eagle Mountain, UT - 84005 Phone: 801-597-0618 Website: http://www.ldpassociates.com/	Specialties Other: Other Specialty	Business Type Architect Engineering Firm Manufacturer - Rep	<b>Join Date</b> 06/27/2014	Projects Completed
Elite Energy Solutions, LLC 526 S. Commerce Dr. Orem, UT - 84058 Phone: 801-610-9779 Website: eliteenergysolutions.com	Specialties Building envelope	Business Type Contractor	<b>Join Date</b> 03/17/2014	Projects Completed



Electro Systems Corp.	Specialties Controls	Business Type Contractor	Join Date 06/23/2014	Projects Completed
559 West 9460 South Sandy, UT - 84070 Phone: 801-562-2231	Lighting	ooaate.	03/23/2011	Completed
Utah Yamas Controls Inc. 13526 S. 110 W.	Specialties Building envelope Controls	Business Type Contractor Distributor	Join Date 01/21/2013	Projects Completed
Draper, UT - 84020 Phone: 801-990-1950 Website: www.utahyamas.com	HVAC - evaporative HVAC - unitary Lighting Motors and VFDs Other: Other Specialty	Engineering Firm Manufacturer - Rep		
Crum Electric Supply - Salt Lake City	Specialties Lighting	Business Type Distributor	Join Date 02/10/2007	Projects Completed
1003 West 1060 South Salt Lake City, UT - 84119 Phone: 801-539-7471 Website: crum.com	Lighting	Distributor	02/10/2007	4
A-C Electric Inc.	Specialties Lighting	Business Type Contractor	Join Date 04/03/2003	Projects Completed
729 South 330 West Salt Lake City, UT - 84101 Phone: 801-364-1747 Website: CampbellAndBruce.com				54
YESCO LLC - Young Electric Sign Co Salt Lake City, UT	Specialties Appliances Controls	Business Type Contractor Manufacturer - Rep	Join Date 09/22/2012	Projects Completed 66
1605 S. Gramercy Road Salt Lake City, UT - 84104 Phone: 801-464-6413 Website: www.yesco.com	Lighting Motors and VFDs	manadadio. Rop		00
<b>Hussmann Corporation</b>	Specialties Controls	Business Type Manufacturer - Rep	Join Date 01/14/2015	Projects Completed
1385 W 2200 St Salt Lake City, UT - 84119 Phone: 805-458-7615 Website: hussmann.com	Food Service HVAC - evaporative HVAC - unitary Lighting Motors and VFDs			•
Positive Power LLC	Specialties Lighting	Business Type Contractor	Join Date 03/06/2006	Projects Completed
4658 W. 1150 S. Ogden, UT - 84404 Phone: 801-732-0680		Distributor		23
Bastion Technologies, LLC	Specialties Lighting	Business Type Distributor	Join Date 07/30/2014	Projects Completed
175 W 7065 S Midvale, UT - 84047 Phone: 800-328-6024 Website: www.bastiontech.com		Manufacturer - Rep Other: consultant		16
Advanced Energy Lighting Technology	Specialties Lighting	Business Type Distributor	Join Date 06/06/2006	Projects Completed
146 N. Old Highway 91 Suite 4 Hurricane,, UT - 84737 Phone: 435-703-0711				39
JRC Inc.	Specialties Controls	Business Type Manufacturer - Rep	Join Date 06/18/2007	Projects Completed
3041 West 2100 South Salt Lake City, UT - 84119 Phone: 801-972-3970 Website: jrclight.com	Lighting	Other		12
Western Land Management LLC	Specialties Food Service	Business Type Distributor	Join Date 01/29/2016	Projects Completed
2815 East Linwood Lane Manila, UT - 84046 Phone: 949-285-9454	Lighting	-		
Elysium Energy LLC	Specialties Lighting	Business Type Other	Join Date 04/30/2015	Projects Completed
14466 South Long Ridge Drive Herriman , UT - 84096 Phone: 801-440-6821	Other: Other Specialty			9



Consolidated Electrical Distributors, Inc Sandy 622 W. 9400 S.	Specialties Lighting	Business Type Distributor	Join Date 08/01/2011	Projects Completed 4
Sandy, UT - 84070 Phone: 801-566-4864				
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	<b>Join Date</b> 12/31/2014	Projects Completed
Electrical Power & Controls  5203 Holder Dr. WVC, UT - 84120 Phone: 801-971-1913 Website: www.epc120.com	Specialties Lighting Motors and VFDs	Business Type Contractor	Join Date 03/28/2014	Projects Completed
Royal Wholesale Electric - Ogden 1210 W. 3050 S. Ogden, UT - 84401 Phone: 801-621-6730 Website: royalutah.com	Specialties Lighting	Business Type Distributor	<b>Join Date</b> 04/28/2007	Projects Completed 78
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 76
Mechanical Products Intermountain 198 W. CottageAve Sandy, UT - 84070 Phone: 801-352-9003 Website: mp-int.com	Specialties Controls HVAC - evaporative HVAC - unitary	Business Type Distributor Manufacturer - Rep	<b>Join Date</b> 06/01/2008	Projects Completed
Collings Development IIc 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
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	<b>Join Date</b> 01/11/2013	Projects Completed
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 15
Mountain Lighting 390 S Main Street Cedar city, UT - 84720 Phone: 435-586-5502 Website: www.mountainlighting.com	<b>Specialties</b> Lighting	Business Type Distributor	Join Date 05/09/2013	Projects Completed 2
Gunthers Comfort Air  81 S 700 E American Fork, UT - 84003 Phone: 801-756-9683 Website: gunterscomfortair.com	<b>Specialties</b> HVAC - unitary	Business Type Contractor	Join Date 08/01/2004	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	<b>Join Date</b> 08/01/2006	Projects Completed 2



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
Aspen Roofing	Specialties	Business Type	Join Date	Projects
472 West 3440 South Suite A Salt Lake City, UT - 84115 Phone: 801-483-1660	Building envelope	Contractor	03/03/2014	Completed
<b>Dairy Systems Company</b>	Specialties Controls	Business Type Contractor	Join Date 05/13/2013	Projects Completed
4004 N Highway 91 Hyde Park, UT - 84318 Phone: 435-563-6660	Farm and Dairy Irrigation Motors and VFDs	Distributor Other: Retailer	00/10/2010	Completed
Nelson's Heating & Refrigeration	Specialties HVAC - unitary	Business Type Contractor	Join Date 12/01/2005	Projects Completed
1070 Bowling Alley Ln. Moab, UT - 84532 Phone: 435-259-5625	Motors and VFDs		.2/0 //2000	Completed
Tri-Phase Electric	Specialties Lighting	Business Type Contractor	Join Date 05/30/2005	Projects Completed
775 East 930 South American Fork, UT - 84003 Phone: 801-756-6008	gg			3
Crescent Electric Supply Company - Salt Lake City	Specialties Lighting	Business Type Distributor	Join Date 10/17/2012	Projects Completed 36
3140 South 300 West Salt Lake City, UT - 84115 Phone: 801-486-0701 Website: www.cesco.com				30
<b>National Equipment Corporation</b>	Specialties	Business Type Distributor	Join Date 02/01/2009	Projects Completed
242 W 3680 S Salt Lake City, UT - 84115 Phone: 801-266-5824	Other: Other Specialty	Distributer	02/01/2000	Completed
Mark and Delaun Enterprises Inc.	Specialties Appliances	Business Type Contractor	Join Date 06/23/2015	Projects Completed
55 E Center St. Suite 140 Heber City, UT - 84032 Phone: 435-654-4623 Website: www.heberappliance.com	HVAC - evaporative			Completon
Engineering System Solutions DBA ES2	<b>Specialties</b> Appliances	Business Type Engineering Firm	Join Date 05/08/2014	Projects Completed
4943 N 29 E Suite A Idaho Falls, ID - 83401 Phone: 208-552-9874 Website: www.es2eng.com	Building envelope Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs			·
Western Energy Authority	Specialties	Business Type Architect	Join Date 01/20/2014	Projects Completed
2138 N Frontage Rd Centerville, UT - 84014 Phone: 435-287-4334 Website: www.westernenergyauthority.com	Other: Other Specialty		0.120.20	Completed
Verismic Software Inc.	Specialties Office Equipment	Business Type Contractor	Join Date 01/16/2013	Projects Completed
65 Enterprise Aliso Viejo, CA - 92656 Phone: 949-270-1903 x 4736 Website: www.verismic.com	Other: Other Specialty		5.7.10/2010	Completed
Applied Product Solutions	Specialties Controls	Business Type Manufacturer - Rep	Join Date 11/17/2015	Projects Completed
2822 South 1030 West Salt Lake City, UT - 84119 Phone: 801-441-4949 Website: www.aps.hvacinfo.com	HVAC - evaporative HVAC - unitary Motors and VFDs		,2010	- Simplotou



Cook Electric Inc.	Specialties Lighting	Business Type Contractor	Join Date 02/09/2013	Projects Completed
10956 S. Surrey Meadow dr. South Jordan, UT - 84095 Phone: 801-755-5942	Lighting	Contractor	02/03/2010	Completed
Case, Lowe & Hart, Inc. 2484 Washington Blvd.	Specialties Building envelope Compressed Air	Business Type Architect	<b>Join Date</b> 05/17/2013	Projects Completed
Suite 510, Ogden, UT - 84401 Phone: 801-399-5821 Website: www.clhae.com	Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Engineering Firm		
Van Boerum & Frank Associates	Specialties Building envelope	Business Type Architect	Join Date 01/01/2012	Projects Completed
330 South 300 East Salt Lake City, UT - 84111 Phone: 801-530-3148 Website: www.vbfa.com	Controls HVAC - evaporative HVAC - unitary Motors and VFDs	Engineering Firm Other		·
TEC Electric	Specialties Controls	Business Type Contractor	Join Date 05/11/2011	Projects Completed
755 West 200 South Logan, UT - 84321 Phone: 435-753-0920 Website: www.tec-electric.com	Lighting Motors and VFDs			10
Compressor - Pump & Service, Inc.	<b>Specialties</b> Compressed Air	Business Type Distributor	Join Date 10/21/2013	Projects Completed
3333 W. 2400 S. Salt Lake City, UT - 84119 Phone: 801-973-0154 Website: www.compressor-pump.com				
McKinstry Essention, LLC 112 N. Rubey Dr.	Specialties Building envelope	Business Type Engineering Firm	Join Date 02/12/2014	Projects Completed
Suite 200, Golden, CO - 80403 Phone: 435-632-8433 Website: www.mckinstry.com	Compressed Air Controls HVAC - evaporative HVAC - unitary Irrigation Lighting Motors and VFDs Other: Other Specialty			
CEME LED, LLC - Commercial Energy Makeover Experts	Specialties Controls	Business Type Distributor	Join Date 02/10/2015	Projects Completed
752 N 1475 E Layton, UT - 84040 Phone: 801-755-8099 Website: www.cemeled.com	Lighting			4
Cooperative Business Lighting Partners, LLC	Specialties Lighting	Business Type Manufacturer - Rep	Join Date 04/10/2014	Projects Completed
P.O. Box 3984 Carmel, IN - 86082 Phone: 317-402-2562				
Pacheco Company LLC	Specialties Lighting	Business Type Contractor	Join Date 02/12/2015	Projects Completed
3646 E. Summer Hill Salt Lake City, UT - 84121 Phone: 801-541-3375 Website: www.pachecoco.com	Other: Other Specialty	Distributor Manufacturer - Rep		·
St. George Winlectric	Specialties Controls	Business Type Distributor	Join Date 12/10/2013	Projects Completed
298 North Industrial Road St. George, UT - 84770 Phone: 435-628-1680	Farm and Dairy Lighting Motors and VFDs			
CoolChill, LLC	Specialties	Business Type Contractor	Join Date 05/05/2014	Projects Completed
535 East 4500 South Suite D120, Salt Lake City, UT - 84107 Phone: 801-685-2665 Website: www.coolchill.com	Other: Other Specialty			·



Bright Star Energy Management, LLC **Specialties Business Type** Join Date **Projects** Lighting Other 07/01/2012 Completed 214 S. Cole Rd. Boise, ID - 83709 Phone: 208-922-6460 Website: brightstarenergy.net RealWinWin, Inc. **Specialties Business Type** Join Date **Projects** 10/14/2013 Completed Appliances 1926 Arch Street, 4F Building envelope Other: Energy Philadelphia, PA - 19103 Phone: 215-732-4480 x 349 Efficiency Incentive Controls Food Service Administration and Website: www.realwinwin.com HVAC - evaporative HVAC - unitary Consultation Lighting Motors and VFDs Office Equipment Batteries Plus Bulbs 848 - Lehi Join Date **Specialties Business Type Projects** Lighting Distributor 10/28/2013 Completed 770 East Main Street, Suite E Lehi, UT - 84043 Phone: 801-372-3249 Website: www.batteriesplusbulbs.com **Amos and Connors Sales Specialties Business Type** Join Date **Projects** Lighting Manufacturer - Rep 07/10/2015 Completed 1323 West 7900 South suite #107 West Jordan, UT - 84088 Phone: 801-565-8919 Website: www.amosandconnors.com Colvin Engineering Associates, Inc. **Specialties Business Type** Join Date **Projects** Controls Architect 04/29/2013 Completed 244 W 300 N HVAC - evaporative HVAC - unitary Other: Other Specialty **Engineering Firm** Suite 200, Salt Lake City, UT - 84103 Phone: 801-322-2400 Business Type Manufacturer - Rep Join Date **Fanlight Corp Specialties Projects** Lighting 02/22/2016 Completed 2000 S Grove Ave Bldg B Ontario, CA - 91761 Phone: 909-930-6868 Website: plusriteusa.com / mynaturazled.com **Business Type** GF **Specialties** Join Date **Projects** Controls Manufacturer - Rep 09/04/2014 Completed 664 East 1300 North Pleasant Grove, UT - 84062 Lighting Phone: 801-785-8838 Website: www.gelighting.com **Spectrum Engineers Specialties Business Type** Join Date **Projects** Engineering Firm 10/14/2013 Lighting Completed 324 S. State Street, Suite 400 Salt Lake City, UT - 84111 Phone: 801-328-5151 **Specialties** HVAC - unitary **Business Type United Team Mechanical** Join Date **Projects** Contractor 09/01/2005 Completed 151 N 600 W Kaysville, UT - 84037 Phone: 801-991-1145 Motors and VFDs Wilson Mohr **Specialties Business Type** Join Date **Projects** Motors and VFDs Contractor 10/01/2011 Completed 3186 S. Washington St. Salt Lake City, UT - 84115 Phone: 801-214-3300 Website: wilsonmohr.com Whitehead Wholesale Electric, Inc. **Business Type Specialties** Join Date **Projects** Lighting Distributor 04/15/2006 Completed Ogden, UT - 84402 Phone: 801-394-1657



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 58
PPM Plumbing, Heating & Cooling 864 North 1430 West Orem, UT - 84058 Phone: 801-226-3033	Specialties HVAC - unitary	Business Type Contractor	<b>Join Date</b> 06/01/2004	Projects Completed
Mountain Valley Pump Service 1444 N 300 W Logan, UT - 84341 Phone: 435-753-0916	Specialties Motors and VFDs	Business Type Distributor	<b>Join Date</b> 08/01/2004	Projects Completed
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	<b>Join Date</b> 02/18/2015	Projects Completed 34
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	<b>Join Date</b> 01/01/2009	Projects Completed
Jordan Valley Electric, Inc. 4225 W. Nike Dr. #A West Jordan, UT - 84088 Phone: 801-282-2310	Specialties Lighting	Business Type Contractor	Join Date 10/05/2005	Projects Completed 2
Atom Electric Inc.  8454 South 2200 West West Jordan, UT - 84088 Phone: 801-974-5335 Website: www.atomelectric.com	Specialties Lighting	Business Type Contractor	Join Date 05/30/2005	Projects Completed 50
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
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
DiVi Energy, LLC 191 North 290 West Lindon, UT - 84042 Phone: 801-243-1811	Specialties Lighting	Business Type Manufacturer - Rep Other	<b>Join Date</b> 01/23/2013	Projects Completed 76
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
ESP+*  9580 South 500 West Sandy, UT - 84070 Phone: 801-566-0600 Website: espplus.net	Specialties Lighting	Business Type Distributor	<b>Join Date</b> 04/05/2005	Projects Completed 577



BNA Consulting	Specialties	Business Type	Join Date	Projects
635 South State Street Salt Lake City, UT - 84111 Phone: 801-532-2196 Website: www.bnaconsulting.com	Lighting	Other	05/10/2010	Completed
Black Diamond Electric	Specialties	Business Type	Join Date	Projects
170 S. Mountain Way Dr. Orem, UT - 84058 Phone: 801-473-1203 Website: blackdiamondelectriclc.com	Lighting Motors and VFDs	Contractor	05/11/2011	Completed 5
Gustave A. Larson Company	Specialties HVAC - unitary	Business Type	Join Date 02/01/2007	Projects
210 W. Crosswood Square Salt Lake City, UT - 84115 Phone: 801-487-0644 Website: galarson.com	Motors and VFDs	Distributor	02/01/2007	Completed
Platt Electric Supply, Inc West Valley	Specialties Controls	Business Type Distributor	Join Date 11/27/2012	Projects Completed
1730 South 4650 West West Valley, UT - 84104 Phone: 801-972-1464 Website: www.platt.com	Lighting Motors and VFDs		.,,_,,_	Completed
Schooley Electric Inc.	Specialties Lighting	Business Type Contractor	Join Date 03/26/2009	Projects Completed
676 W. 8th Ave Midvale, UT - 84047 Phone: 801-641-3395	Lighting	Contractor	03/20/2003	17
Honeywell International	Specialties Controls	Business Type Contractor	Join Date 05/01/2006	Projects Completed
2371 S. Presidents Way Suite A Salt Lake City, UT - 84120 Phone: 801-978-7136 Website: honeywell.com	HVAC - evaporative HVAC - unitary Motors and VFDs	Distributor Manufacturer - Rep	03/01/2000	Completed
Profile Systems LLC	Specialties Controls	Business Type Distributor	Join Date 02/20/2015	Projects Completed
1000 E 80th Place Suite 777 S Merrillville, IN - 46410 Phone: 219-796-3575 x 4336 Website: www.profilesystems.com	Other: Other Specialty		02/20/2013	Completed
<b>Garrett Mitchell Electric</b>	Specialties Lighting	Business Type Contractor	Join Date 05/14/2008	Projects Completed
125 West 200 North American Fork, UT - 84003 Phone: 801-830-0993	Lighting	Contractor	03/14/2000	9
HD Supply Facilities Maintenance, Ltd.	Specialties Appliances	Business Type Distributor	Join Date 01/22/2014	Projects Completed
10641 Scripps Summit Court San Diego, CA - 92131 Phone: 858-831-2231 Website: www.hdsupplysolutions.com	HVAC - evaporative HVAC - unitary			Completed
Optica Energy Management, LLC	Specialties	Business Type Distributor	Join Date	Projects
1772 Ross Dr Ogden, UT - 84403 Phone: 888-442-4866 Website: www.opticaenergy.com	HVAC - unitary Lighting Motors and VFDs	Other: Energy Management Company	04/11/2013	Completed 17
Engineered Systems Assoc., Inc.	Specialties Controls	Business Type Engineering Firm	Join Date 01/10/2014	Projects Completed
1355 E. Center Street Pocatello, ID - 83201 Phone: 208-233-0501	HVAC - evaporative HVAC - unitary Motors and VFDs	Engineeiiig i <sup>-</sup> IIIII	01/10/2014	Completed
WESCO Distribution - Salt Lake City	Specialties Lighting	Business Type Distributor	Join Date 03/04/2004	Projects Completed
3210 South 900 West Salt Lake City, UT - 84119 Phone: 801-975-0600 Website: wesco.com	Motors and VFDs	Signification	30,04,2004	13

Phone: 801-393-0415

Website: NEONLIGHTINGUT.COM



Codale Electric Supply, Inc.- Salt **Specialties Business Type** Join Date **Projects** Lake City Controls Distributor 10/02/2002 Completed Lighting 5225 West 2400 South Motors and VFDs Salt Lake City, UT - 84120 Phone: 801-975-7300 Website: codale.com **Specialties Business Type** Join Date **Projects** Controls Distributor 03/01/2005 Completed 2817 S. 1030 W. Salt Lake City, UT - 84119 Phone: 801-486-0500 HVAC - unitary Manufacturer - Rep Motors and VFDs Website: www.trane.com Wyer Electric, LLC **Specialties Business Type** Join Date **Projects** Building envelope 09/05/2014 Contractor Completed 5263 Commerce Dr Controls Murray, UT - 84107 Phone: 801-262-5673 Lighting Motors and VFDs **Business Type** Sika Sarnafil Incorporated Join Date **Projects Specialties** Building envelope Contractor 11/01/2011 Completed 2881 South 900 West Salt Lake City, UT - 84119 Phone: 801-575-8648 Website: usa.sarnafil.sika.com Join Date **Royal Wholesale Electric - Tooele Specialties Business Type Projects** Lighting Distributor 06/09/2007 Completed 332 So. 1200 W Tooele, UT - 84704 Phone: 435-882-4787 **Specialties Contractors HVAC Supply Business Type** Join Date **Projects HVAC** - unitary 07/01/2010 Distributor Completed 2468 S. 1760 W Ogden, UT - 84401 Phone: 801-487-8565 Website: contractorshvacsupply.com Comfort Systems USA Intermountain **Specialties Business Type** Join Date **Projects** Controls Contractor 06/30/2014 Completed HVAC - evaporative HVAC - unitary 2035 Milestone Dr. Suite A Salt Lake City, UT - 84104 Phone: 801-907-6700 Motors and VFDs Website: comfortsystemsutah.com **Specialties Business Type** Platt Electric Supply, Inc. - Tooele Join Date **Projects** 11/16/2007 Controls Distributor Completed 1183 North 80 East Lighting 14 Tooele, UT - 84074 Phone: 435-843-7335 Motors and VFDs Website: platt.com **Architectural Nexus, Inc. Specialties Business Type** Join Date **Projects** Appliances Architect 08/18/2014 Completed 2505 East Parleys Way Salt Lake City, UT - 84109 Building envelope Controls HVAC - evaporative HVAC - unitary Phone: 801-924-5000 Website: www.archnexus.com Lighting Motors and VFDs Office Equipment Aspen Engineering and Environmental LLC **Business Type** Join Date **Specialties Projects** 03/18/2013 Building envelope Engineering Firm Completed Controls HVAC - evaporative HVAC - unitary 140 Aspen Circle Park City, UT - 84098 Phone: 435-565-1535 Lighting Website: www.a2e-llc.com Motors and VFDs **Neon Lighting and Display Inc - DBA Specialties Business Type** Join Date **Projects** - Neon Lighting & Electric Signs Manufacturer - Rep 03/24/2014 Lighting Other: Other Specialty Completed Other: SIGN 211 WEST 1000 SOUTH OGDEN , UT - 84404 CONTRACTOR



Utility Cost Management Consultants	Specialties Lighting	Business Type Other: consultant	Join Date 10/23/2015	Projects Completed
102 E. Cobble Creek Drive Cedar City, UT - 84721 Phone: 435-807-1882 Website: www.ucmc-USA.com				
Evergreen Consulting	Specialties Lighting	Business Type Contractor	Join Date 03/02/2015	Projects Completed
2302 West 8540 South West Jordan, UT - 84088 Phone: 801-233-0882	gg	00	00/02/2010	Completed
Weeden Environments Inc.	Specialties Farm and Dairy	Business Type Distributor	Join Date 07/29/2013	Projects Completed
596202 Highway 59, RR #6 Woodstock, WA - 55555 Phone: 435-436-8463	Lighting	Distributor	0172372010	Completed
Jenson Lighting Maintenance/Refrigeration, Inc.	Specialties Lighting	Business Type Contractor Manufacturer - Rep	Join Date 06/01/2005	Projects Completed
539 W Billins Rd Salt Lake City, UT - 84115 Phone: 801-262-7800		·		
<b>Energy Efficient Lighting</b>	Specialties Lighting	Business Type Distributor	Join Date 09/16/2013	Projects Completed
2228 Bryan Circle Salt Lake City, UT - 84108 Phone: 801-913-1965	Lighting	Distributor	00/10/2010	1
Consolidated Electrical Distributors, Inc Layton	Controls	Business Type Distributor	Join Date 01/28/2015	Projects Completed
606 N Marshall Way Ste B Layton, UT - 84401 Phone: 801-499-0257	Lighting			8
Innovative Repairs LLC	Specialties Controls	Business Type Manufacturer - Rep	Join Date 04/19/2013	Projects Completed
524 S. 300 E. Springville, UT - 84663 Phone: 801-489-4460	Farm and Dairy Lighting Motors and VFDs	manadaror resp	0 17 10/2010	9
ESCO	Specialties Lighting	Business Type Contractor	Join Date 07/04/2004	Projects Completed
2525 South 300 West South Salt Lake, UT - 84115 Phone: 801-486-8421 Website: escoservice.com	_igi.iiiig	CO.III CO.	0170 W200 1	31
Professional Electrical Services, Inc.	Specialties Lighting	Business Type Contractor	Join Date 12/10/2014	Projects Completed
2443 Progress Dr. Salt Lake City, UT - 84119 Phone: 801-973-8381 Website: proelectric.cc	_gg			Completed
<b>Duncan Electric Supply</b>	Specialties	Business Type Distributor	Join Date 09/26/2008	Projects
580 South 1100 West West Bountiful, UT - 84087 Phone: 501-295-5548	Lighting	Distributor	09/20/2006	Completed 18
Commercial Lighting Supply, Inc.*	Specialties Lighting	Business Type Distributor	Join Date 11/02/2002	Projects Completed
2440 South 900 West Salt Lake City, UT - 84115 Phone: 801-262-0888 Website: commerciallightinginc.com	g.,,g	2.oribator	. 1,02,2002	744
Engineering Economics, Inc.	Specialties Building envelope	Business Type Engineering Firm	Join Date 01/20/2014	Projects Completed
780 Simms Street Suite 210 Golden, CO - 80401 Phone: 800-869-6902	Controls HVAC - evaporative HVAC - unitary	Lightoning I iiii	3 1/20/20 TT	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	<b>Join Date</b> 08/09/2013	Projects Completed 51
DMA - Total Lighting Concepts  5263 S. Commerce Dr. Suite 201, Murray, UT - 84107 Phone: 801-268-6300 Website: www.dmatlc.com	Specialties Controls Lighting	Business Type Manufacturer - Rep	<b>Join Date</b> 05/30/2005	Projects Completed 20
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	<b>Join Date</b> 04/22/2013	Projects Completed 25
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	<b>Join Date</b> 05/01/2008	Projects Completed 34
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
J&K Insulation LLC. 3155 north highway 89 suite d pleasant view, UT - 84404 Phone: 801-782-7396	Specialties Building envelope Other: Other Specialty	Business Type Contractor	<b>Join Date</b> 09/05/2013	Projects Completed
Budget Plumbing & Rooter LLC 390 W Main American Fork, UT - 84003 Phone: 801-763-5775 Website: www.budgetknowsplumbing.com	Specialties Controls HVAC - evaporative HVAC - unitary	Business Type Contractor	<b>Join Date</b> 01/08/2016	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	<b>Join Date</b> 05/12/2009	Projects Completed 8
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	<b>Join Date</b> 09/27/2012	Projects Completed
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
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 98



WHW Engineering Inc. 8619 Sandy Parkway #101	Specialties HVAC - evaporative HVAC - unitary	Business Type Engineering Firm	Join Date 02/23/2015	Projects Completed
Sandy, UT - 84070 Phone: 801-466-4021	Motors and VFDs			
<b>Quantum Lighting Group</b>	Specialties Lighting	Business Type Manufacturer - Rep	Join Date 05/30/2005	Projects Completed
4074 S. 300 W Salt Lake City, UT - 84107 Phone: 801-270-0010		Other		33
Hatch Lighting	Specialties Lighting	Business Type Distributor	Join Date 05/06/2014	Projects Completed
4133 N 45 E Idaho Falls, ID - 83401 Phone: 208-200-3000	gg			7
Hawk Electric, Inc.	Specialties Lighting	Business Type Contractor	Join Date 05/01/2005	Projects Completed
P.O. Box 540150 North Salt Lake, UT - 84054 Phone: 801-397-1020	Motors and VFDs			9
CAO Group, Inc.	Specialties Lighting	Business Type Engineering Firm	Join Date 11/16/2015	Projects Completed
4628 W. Skyhawk Drive West Jordan, UT - 84084 Phone: 801-256-9282 Website: www.caolighting.com	3 1 3	Other: Manufacturer		
Harris Mechanical Intermountain	Specialties HVAC - evaporative	Business Type Contractor	Join Date 01/27/2014	Projects Completed
1925 South Milestone Drive Suite E,	HVAC - unitary			Completed
Salt Lake City, UT - 84104 Phone: 801-433-2640 Website: www.hmcc.com				
H-C Design & Consulting	Specialties Food Service	Business Type Manufacturer - Rep	Join Date 07/01/2013	Projects Completed
P.O. Box 10545 Bozeman, MT - 59719 Phone: 406-522-7700		·		
Codale Electric Supply, Inc - Casper	Specialties Lighting	Business Type Distributor	Join Date 06/27/2013	Projects Completed
3131 Wood Court Casper, WY - 82601 Phone: 702-261-8900 Website: www.codale.com	5 0			1
Conserve-A-Watt Lighting	Specialties Lighting	Business Type Distributor	Join Date 04/03/2003	Projects Completed
2327 South Decker Lake Blvd West Valley City, UT - 84119 Phone: 801-975-9363 Website: Cawlighting.com	5 5			163
Ken Garner Engineering, Inc.	Specialties Lighting	Business Type Engineering Firm	Join Date 05/11/2011	Projects Completed
420 E. South Temple Suite 370, Salt Lake City, UT - 84111 Phone: 801-328-8800 Website: kengarner.com	Lighting	Liigiileeiiiig i iiiii	03/11/2011	Completed
Nebo Comfort Systems	Specialties	Business Type Contractor	Join Date 10/03/2013	Projects Completed
210 E 800 S Genola, UT - 84655 Phone: 801-465-2709	HVAC - unitary	Contractor	10/03/2013	Completed
Ovation Engineering & Consulting	Specialties Controls	Business Type Engineering Firm	Join Date 12/08/2014	Projects Completed
1113 N Victoria Way Salt Lake City, UT - 84116 Phone: 801-871-0900	Lighting	.gg ·		



**Mountain West Mechanical Specialties Business Type** Join Date **Projects** HVAC - evaporative HVAC - unitary Contractor 03/17/2014 Completed 2336 W. 5200 S. Rexburg, ID - 83440 Phone: 208-356-0370 Website: www.mountainwestmechanical.com **Dixon Electric Inc. Specialties** Join Date **Projects Business Type** 04/07/2014 Lighting Motors and VFDs Contractor Completed 1273 South River View Dr. Spanish Fork, UT - 84660 Phone: 801-310-4928 **Eco Safe Lighting Specialties Business Type** Join Date **Projects** Lighting 02/11/2013 Completed 4600 NW Camas Meadows Drive, Suite 210 Camas, WA - 98607 Phone: 360-567-1923 Website: http://www.estlights.com/about-us/ **Business Type Energy Management Corporation Specialties** Join Date **Projects** HVAC - unitary Distributor 05/01/2004 Completed 501 West 700 South Motors and VFDs Salt Lake City, UT - 84101 Phone: 801-366-4100 Website: emcsolutions.com Platt Electric Supply, Inc. - Salt Lake **Specialties Business Type** Join Date **Projects** Controls 11/16/2007 Distributor Completed Lighting 840 W 2600 S Motors and VFDs Salt Lake City, UT - 84119 Phone: 801-974-5773 Website: www.platt.com **Golden Spike Electric Specialties Business Type** Join Date **Projects** 03/01/2010 Completed Lighting Contractor 12058 N. Harley Dr. Garland, UT - 84312 Phone: 435-279-4861 Solite Supply, Inc **Specialties Business Type** Join Date **Projects** Lighting Distributor 12/16/2013 Completed 484 South 490 West Orem, UT - 84058 Phone: 801-888-8865 Website: www.solitesupply.com Central Electric Supply\* **Specialties** Join Date **Business Type Projects** Lighting Distributor 01/02/2006 Completed 190 North 100 West Richfield, UT - 84701 Phone: 435-896-8486 Website: www.centralelectricsupply.com **Royal Wholesale Electric - Logan Specialties** Join Date **Business Type Projects** Lighting Distributor 01/09/2008 Completed 917 W 600 N Ste 101 Logan, UT - 84321 Phone: 435-752-7692 Website: royalutah.com Consolidated Electrical Distributors, Inc. - Salt Lake City **Specialties Business Type** Join Date **Projects** Lighting Distributor 09/25/2012 Completed Motors and VFDs 1819 S. 900 W. Salt Lake City, UT - 84104 Phone: 801-486-3501 Riverside Electric Inc. **Specialties** Join Date **Business Type Projects** Lighting Contractor 12/10/2006 Completed P.O. Box 98 Riverside, UT - 84334 Phone: 801-399-4200

Midvale, UT - 84047 Phone: 801-428-0400 Website: www.ams-ut.com



Business Type Engineering Firm Jacobs Engineering Group, Inc. **Specialties** Join Date **Projects** Building envelope 05/08/2015 Completed 3 Tower Bridge 2 Ash Street, Compressed Air HVAC - evaporative HVAC - unitary Conshohocken, PA - 19428 Phone: 610-238-1000 Lighting Website: www.Jacobs.com Motors and VFDs Other: Other Specialty **Cripps Electric LLC Specialties** Join Date **Business Type** Projects 09/30/2013 Controls Contractor Completed 850 West HWY 6 Lighting PO Box 526, Wellington, UT - 84542 Phone: 435-650-1325 Website: www.crippselectric.com Jenson Refrigeration Inc.DBA **Business Type Specialties** Join Date **Projects** Jenson Lighting Maintenence Lighting Contractor 04/15/2013 Completed 539 W. Bilinis Road Murray, UT - 84157 Phone: 801-262-7800 Website: www.jensonutah.com Miter Corp. **Specialties** Join Date **Business Type Projects** 09/22/2012 Contractor Completed Lighting 6364 Shady Grove Cir. Murray, UT - 84121 Phone: 801-949-6364 **Prettyman Electric Specialties** Join Date **Business Type Projects** Appliances Contractor 12/05/2013 Completed 5901 S. Jonquil Drive 5901 S. Jonquil Drive, Taylorsville, UT - 84129 Phone: 801-243-4055 Building envelope Other: Design Build, Compressed Air Repair, Service, Controls Maintenance Food Service HVAC - unitary Irrigation Lighting Motors and VFDs American Electric Company, Inc. Join Date Specialties **Business Type Projects** Appliances 04/06/2015 Contractor Completed 78 West 13775 South, Suite 9 Building envelope Draper, UT - 84020 Phone: 801-254-0782 Controls Lighting Website: www.americanelectric.cc Motors and VFDs Other: Other Specialty **Business Type Titan LED - North Logan** Join Date **Specialties Projects** Manufacturer - Rep 07/08/2014 Lighting Completed 641 E 2200 N North Logan, UT - 84341 Phone: 801-784-8260 Website: www.titanled.net **Home Energy Solutions, INC Specialties Business Type** Join Date **Projects** Building envelope Other: Other Specialty Contractor 12/10/2015 Completed 1371 Ramola St Kaysville, UT - 84037 Phone: 801-230-8453 Join Date **Consolidated Electrical Distributors Specialties Business Type Projects** - Logan, UT Farm and Dairy Distributor 03/26/2005 Completed Irrigation 636 N. 600 W. Lighting Logan, UT - 84321 Phone: 435-752-8905 **American Mechanical Systems Specialties Business Type** Join Date **Projects** Service, LLC 11/30/2012 Controls Contractor Completed HVAC - unitary 7530 South State Street Motors and VFDs



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
Salmon Electrical Contractors  1116 W. 500 S. Suite 1 West Bountiful, UT - 84087 Phone: 801-292-3444	Specialties Lighting	Business Type Contractor	<b>Join Date</b> 04/01/2006	Projects Completed 30
DesignTek Consulting Group, LLC 1600 W. 2200 S. Salt Lake City, UT - 84119 Phone: 801-255-5449 Website: www.designtekconsulting.com	Specialties Compressed Air Controls HVAC - evaporative HVAC - unitary Lighting Motors and VFDs	Business Type Contractor Engineering Firm	<b>Join Date</b> 11/11/2013	Projects Completed
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 6
Clark's Quality Roofing, Inc.  334 W. Anderson Avenue Salt Lake City, UT - 84107 Phone: 801-266-3575 Website: clarkroof.com	Specialties Building envelope	Business Type Contractor	<b>Join Date</b> 09/19/2012	Projects Completed
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	<b>Join Date</b> 10/13/2015	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	<b>Join Date</b> 05/07/2014	Projects Completed
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	<b>Join Date</b> 01/12/2016	Projects Completed
GTC Electric  PO Box 731  Park City, UT - 84060  Phone: 435-731-0727	Specialties Appliances Lighting Motors and VFDs	Business Type Contractor	<b>Join Date</b> 07/30/2014	Projects Completed
Utah Window Tint Inc.  8744 S. Sandy Pkwy. Unit G Sandy, UT - 84070 Phone: 801-556-8139 Website: www.utahwindowtint.com	<b>Specialties</b> Building envelope Other: Other Specialty	Business Type Contractor	<b>Join Date</b> 02/25/2015	Projects Completed
Contractors HVAC Supply  West Jordan, UT - Phone: 801-613-3230 Website: contractorshvacsupply.com	Specialties HVAC - unitary	Business Type Distributor	<b>Join Date</b> 07/01/2010	Projects Completed
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	<b>Join Date</b> 10/03/2013	Projects Completed 23



Perfect Vision Lighting 1489 So. Trapper Ct.	Specialties Lighting	Business Type Other	Join Date 05/30/2005	Projects Completed 190
Saratoga Springs, UT - 84043 Phone: 801-509-1235				190
Midgley-Huber, Inc. 2465 Progress Drive	Specialties HVAC - evaporative	Business Type Manufacturer - Rep	Join Date 05/01/2007	Projects Completed
Salt Lake City, UT - 84119 Phone: 801-972-5011 Website: Migley-huber.com	HVAC - unitary			
Platt Electric Supply, Inc Layton	Specialties Controls	Business Type Distributor	Join Date 10/02/2013	Projects Completed
730 Marshall Way Layton, UT - 84041 Phone: 801-544-5144	Lighting Motors and VFDs			9
Kent Lindquist - Electrical Contractor	Specialties Building envelope Lighting	Business Type Contractor	Join Date 11/04/2014	Projects Completed
1436 Spanish Valley Dr Moab, UT - 84532 Phone: 435-259-5638	0 0			
Hidden Valley Electric	Specialties Lighting	Business Type Contractor	Join Date 09/10/2010	Projects Completed
11552 Hickory Valley Dr Sandy, UT - 84092 Phone: 801-707-6873				
ACX Professional Energy Management	Specialties Appliances	Business Type Contractor	Join Date 04/14/2015	Projects Completed
563 Ogden Canyon Ogden, UT - 84401 Phone: 385-325-2295 Website: acx-ut.com	Building envelope Compressed Air Controls Farm and Dairy Food Service HVAC - evaporative HVAC - unitary Irrigation Motors and VFDs Office Equipment Other: Other Specialty	Other: Energy Audits & Commissioning		
Riverside Plumbing & Htg, Inc.	Specialties HVAC - unitary	Business Type Contractor	Join Date 11/01/2005	Projects Completed
366 N 500 W Moab, UT - 84532 Phone: 435-259-8324	Motors and VFDs			·
Forced Aire HVAC	<b>Specialties</b> HVAC - evaporative	Business Type Contractor	Join Date 08/28/2015	Projects Completed
1384 N Angel Street Layton, UT - 84041 Phone: 801-593-8265 Website: http:www.forcedaire.com				
Modern Mechanical LLC	Specialties Appliances	Business Type Contractor	Join Date 08/14/2014	Projects Completed
1501 West 2650 South Ste 103 Ogden, UT - 84401 Phone: 801-731-0337 Website: www.modernmechanicalutah.com	Compressed Air Controls Food Service HVAC - evaporative HVAC - unitary Motors and VFDs			
Millcreek Electric Co., Inc.	Specialties Appliances	Business Type Contractor	Join Date 06/16/2014	Projects Completed
4042 Buck Hollow Lane Bluffdale, UT - 84065 Phone: 801-263-2300 Website: www.millcreekelectric.com	Controls Food Service Irrigation Lighting Motors and VFDs Office Equipment			11
Kendrick Electric	Specialties Lighting	Business Type Contractor	Join Date 11/14/2014	Projects Completed
1700 E 1700 North Logan, UT - 84341 Phone: 435-752-1888				6



Rocky Mountain Electric - Idaho Falls 6698 N. 25th E Idaho Falls, ID - 83401	Specialties Lighting	Business Type Contractor	<b>Join Date</b> 08/27/2014	Projects Completed
Phone: 208-587-9682 x 6  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	Business Type Distributor Manufacturer - Rep	<b>Join Date</b> 03/04/2015	Projects Completed
MKK Consulting Engineers Inc.	Motors and VFDs Office Equipment Other: Other Specialty Specialties	Business Type	Join Date	Projects
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	Completed
Maneri Agraz Enterprises, LTD.  1620 W Sam Houstan Pkwy N Houston, TX - 77043 Phone: 832-358-3900 Website: www.ma-llc.net	Specialties Lighting	Business Type Other: ESCO-Energy Services Company	<b>Join Date</b> 02/20/2013	Projects Completed
Precision-Paragon [P2] 23281 La Palma Ave Yorba Linda, CA - 92887 Phone: 714-386-5550 Website: www.p-2.com	Specialties Lighting	Business Type Manufacturer - Rep Other: Manufacturer	<b>Join Date</b> 03/13/2013	Projects Completed
Thomson Electric Sales Inc.  127 S. Main Street Logan, UT - 84321 Phone: 435-752-2252	Specialties Lighting	Business Type Distributor Engineering Firm	<b>Join Date</b> 10/22/2007	Projects Completed 28
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
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	<b>Join Date</b> 08/26/2014	Projects Completed
Contractors HVAC Supply  1433 West130 South orem, UT - 84058 Phone: 435-725-0019 Website: contractorshvacsupply.com	Specialties HVAC - unitary	Business Type Distributor	<b>Join Date</b> 07/01/2010	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	<b>Join Date</b> 02/01/2010	Projects Completed 3
B. Jackson Construction 4188 West Nike Drive West Jordan, UT - 84088 Phone: 801-260-0988	Specialties HVAC - unitary Lighting	Business Type Contractor	<b>Join Date</b> 06/01/2010	Projects Completed 6
Hogan Electric Inc. 4035 South Main Salt Lake City, UT - 84107 Phone: 801-261-8300	Specialties Lighting	Business Type Contractor	<b>Join Date</b> 07/01/2004	Projects Completed 16



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
Electrical Wholesale Supply - Murray, UT*  P.O. Box 57857 Murray, UT - 84157 Phone: 801-268-2555 Website: ewsutah.com	Specialties Lighting	Business Type Distributor	<b>Join Date</b> 01/20/2007	Projects Completed 56
BKJ Holdings, LLC 3458 E Fairway Lane Spanish Fork, UT - 84660 Phone: 801-636-5969	Specialties Lighting	Business Type Distributor Manufacturer - Rep	<b>Join Date</b> 01/06/2015	Projects Completed 2
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
Network Consulting Services, inc. 563 West 500 South Suite 245, Bountiful, UT - 84010 Phone: 801-295-7555 Website: http://www.ncsi.us	Specialties Office Equipment	Business Type Architect Contractor Engineering Firm Manufacturer - Rep	Join Date 04/29/2013	Projects Completed
Restaurant and Store Equipment Company  230 West 700 South Salt Lake City, UT - 84101 Phone: 801-364-1981 Website: rescoslc.com	Specialties Appliances Food Service	Business Type Distributor	Join Date 10/15/2013	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	<b>Join Date</b> 09/16/2015	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
Coolerado Corporation 4700 W. 60th Ave., Ste. 3 Arvada, CO - 80003 Phone: 303-375-0878 Website: coolerado.com	Specialties HVAC - evaporative HVAC - unitary	Business Type Distributor Manufacturer - Rep	<b>Join Date</b> 03/01/2007	Projects Completed



# Appendix 7 Utah DSM Outreach and Communications Year 6 Report

January – December 2015

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#### **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 6 (calendar year 2015) of the DSM outreach and communications campaign, including an evaluation of the program in meeting its objectives and a summary of year 6 program activities.

#### **Customer Survey Results**

The Company has conducted customer research each year from 2010 to 2015 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 2016, are included below. Results from the MSI National Benchmarking Database Study are also included and support increasing the focus of our 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**

Two research studies were conducted during the general timeframe of the Year 6 (2015) Campaign to assess the effectiveness of Company communications on customers' awareness of and self-reported participation in the Company's energy efficiency and demand response programs. Third-party, independent market research firms conducted residential customer surveys via telephone interviews. The research studies had an initial 2010 baseline, followed by annual surveys used to measure changes in customer opinions and behaviors.

- Utah Demand Side Management Survey. Telephone interviews were conducted July/August 2010, July/August 2011, September 2012, September 2013, September 2014, and September 2015. The study evaluated the importance of utilities offering energy efficiency programs, actions taken to conserve energy, awareness of and participation in energy efficiency programs and preferred sources for energy efficiency information.
- Customer Awareness Survey. Telephone interviews were completed May/June 2010, May/June 2011, May 2012, May 2013, May 2014 and May 2015. This study evaluated advertising and communication awareness, message recall and message importance, call to action based on Company communications, and the impact of the communications campaign on customer perceptions of Rocky Mountain Power. This research evaluated the opinions of customers who had seen, heard or read Company advertisements and communications (ad aware) compared to those who did not recall the communications (ad non-aware).

In addition to the research studies above, results from the 2014/2015 MSI National Benchmarking Database Study helped guide our recommendations for increasing our focus on small-and medium-sized businesses.

• MSI National Benchmarking Database Study – Telephone interviews were completed in June 2014 and June 2015. The study identifies the main ways residential and small to medium-sized business customers' perceptions of Company 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**

## Advertising and communications recall

Customer communications continue to be effective in creating awareness of energy efficiency and the concept of being *watt*smart. In the 2015 Customer Awareness Survey, 70% of Rocky Mountain Power customers remembered seeing, hearing or reading "being *watt*smart." This represents the highest recall of "being *watt*smart" in this communications survey (2014=63%, 2013=60%; 2012=54%; 2011=57%). The goal is to maintain this level of awareness in 2016 among residential customers. Similar to previous years, customers who remembered seeing, hearing or reading communications from the Company had a higher recall of "being wattsmart" than customers who did not remember any advertising or communications.

## Actions taken to conserve electricity

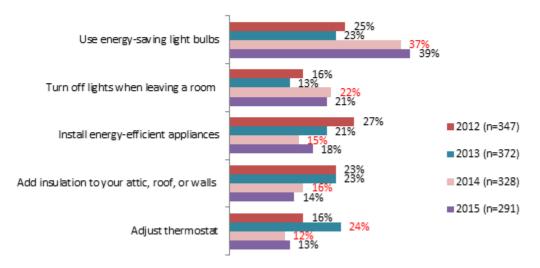
The percent of customers who reported taking actions to conserve energy has remained fairly constant over the past few years. Customers report they are likely to save energy by using energy-saving light bulbs and turning off the lights when leaving a room.

Table 1 – Customers who took action based on advertising\*

2012	2013	2014	2015
30%	32%	33%	33%

<sup>\*2015</sup> Customer Awareness Campaign research

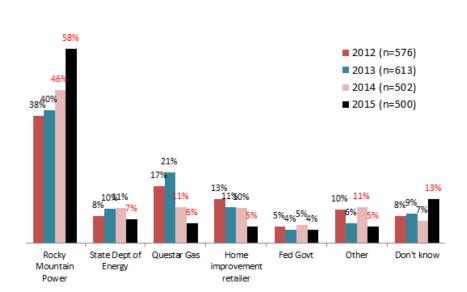
The annual Customer Awareness Survey continues to show the advertising campaign has a positive impact on customers' energy efficiency decisions. In the 2015 research, 33% of customers reported taking an action based on the Company's advertisements or communications. This is consistent with 2014 numbers and similar to results for the past several years. Purchasing energy-efficient appliances/lights and turning off lights/appliances were named as the top two actions taken by customers.



Top 5 Actions Taken to Save Energy

#### Current and preferred energy efficiency information sources

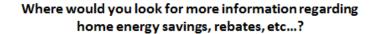
Despite a slight decrease in 2015, customers are still most likely to first see/hear about energy efficiency programs through TV ads and utility bill inserts. Significantly more customers first hear about programs through direct mail from the Company in 2015 than they did in 2014, which is likely due to the *Home Energy Reports* program.

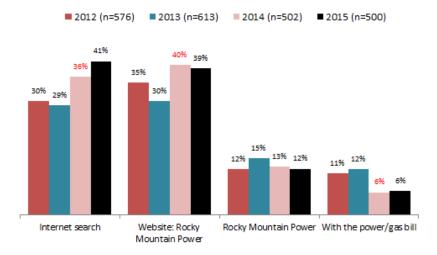


#### Where Customers Turn to First for Information

The website is viewed as a valuable information source for customers who want to know more about energy efficiency and home energy savings. In 2015, 39% said they would use the

Company's website to look for energy savings information. General searches over the Internet (e.g., Google, Yahoo), named by 41% of customers, also surfaced as an important information source.





## Recall of advertising and communication messages

The Customer Awareness Survey measured customer recall of key messages in the Company's advertisements and communications. In 2015, as in previous years, the three key messages with the highest overall recall included being wattsmart, using energy wisely and energy efficiency programs. These key messages continue to be important to customers. More than 90% stated it is very important or somewhat important for the Company to communicate messages about using energy wisely (95%), being *wattsmart* (91%), and energy efficiency programs (93%).

#### Credibility of Rocky Mountain Power as information source

Customers continue to view the Company as a trustworthy source of energy efficiency information. When asked which one of five organizations customers would most likely contact first for energy efficiency information, Rocky Mountain Power topped the list, with 58% of respondents saying the Company is their first choice. This is a significant increase from previous years.

#### **Conclusions**

As shown in past years, customers are driven to conserve energy primarily by the desire to save money. No other reason to conserve compares to this motivation. In 2015, customers were more likely to conserve energy by using energy saving light bulbs than any other method. Customers have increased the number of energy saving activities they already do over the past year. In the coming year, fewer people plan to engage in new energy saving efforts. General program awareness has decreased significantly since last year, continuing a trend of declining awareness

since 2012. Utility bill inserts and emails are typically how customers learn about energy conservation programs. To find more information about the programs, respondents overwhelmingly turn to the Internet as the number one source for information.

About one-third of customers said they took action based on seeing, hearing or reading Company advertising or communications. Key messages recalled from these communications focus on using energy wisely, being *watts*mart and energy efficiency programs — all of which are important messages to customers. Rocky Mountain Power continues to be viewed favorably as a credible source of energy efficiency information. The vast majority of customers believe it is important for the Company to offer programs to help customers conserve electricity. This is true both for customers who have participated, and those who have not participated in DSM programs. The awareness level for being *watts*mart has remained fairly consistent.

#### **Campaign Activities**

#### **Communications, Outreach and Education**

wattsmart 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 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.

#### New in 2015

- New creative *watt*smart, Utah
- 2015 Act *watt*smart video contest The act *watt*smart video contest is our way of creating excitement about energy efficiency as we head into our peak use summer months.
- Energy Efficiency mobile game A "Spot the Difference" game was produced through Game Show Network. The main idea is to direct Game Show Network players to our game where they will play 3 rounds of "spot the difference". When they play, they have to find the eight differences between the two images. We have tried to integrate at least 2-5 energy-efficient differences in each of 25 the different images.

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 E.

#### **Customer Communications**

Beyond paid media, the Company also utilized statement communications, email, website, social media, and news coverage. Tapping into all resources with consistent messaging has been our approach and will continue to be refined. As part of the Company's regular communications to our 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 2015, the Company included the *wattsup* newsletter for all residential customers. This bill insert provided information about wattsmart 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.

#### 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 wattsmart/energy efficiency each month.

#### Social Media:

- Twitter feed promotes energy efficiency tips and wattsmart programs multiple times per week
- Facebook posts wattsmart 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 contain articles on commercial and industrial energy efficiency as well as represented case studies on a monthly and quarterly basis.

#### wattsmart Campaign

#### Paid Media

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

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

Table 2 outlines the value provided by each communication channel.

**Table 2 – Communication Channels** 

	Value to Communication	DI
Communication Channel	Portfolio	Placement
Television Media demo:	Due to the strength and reach of	April – September 2015:
Adults 25-54,	the Salt Lake City designated	9,983,185 impressions.
Primary: residential (English	market area, television is the most effective media channel.	
and Spanish)	effective media channer.	
Secondary: Small/Mid-sized businesses.		
Radio	Given the cost relative to	April – September 2015:
Radio	television, radio builds on	13,878,000 impressions.
	communications delivered via	15,676,000 Impressions.
	television while providing for	
	increased frequency of messages	
Newspaper	Supports broadcast messages and	April – September 2015:
	guarantees coverage of the Utah	2,742,541 impressions.
	service territory.	_
Facebook	Awareness for early adopters	In 2015, Facebook ads
	regarding energy efficiency tips	delivered 1,208,278
	and provides a centralized location	impressions, 25,190 clicks,
	to share information on how to be	and a click through rate of
	wattsmart; feature incentive	2.08%. We gained 178
	programs and other seasonal	new likes. The campaign
	information	delivered 104 times above
		the national average of
	Information posted at least three	0.02%.
	times a week	
Twitter (@RMP_Utah)	Awareness for early adopters	As of December 2015 there
Twitter (@ Revir _Ottain)	regarding energy efficiency tips.	were 3,058 Twitter
	regarding energy enterency ups.	followers in Utah.
	Tweets posted on a weekly basis.	
Digital Display	Supports the broadcast and print	Display advertising
	media while also increasing	delivered 19.9M
	awareness for early adopters who	impressions, 145,752
	are online and are likely to be	clicks, and a CTR (click
	receptive to energy saving	through rate) of .74% -
	messaging.	which is 7.4 times
		above the National

Communication Channel	Value to Communication Portfolio	Placement
	The campaign ran through Ad Network on Deseret News, KSL, GSN (custom game), and Hulu (streaming television).	<ul> <li>average of 0.1%</li> <li>The search campaign delivered 51,021 impressions, 1,846 clicks, and a CTR of 3.62% - which is 3.62 times above the national average of 1%. Average position was 1.7 (goal is to be top 3).</li> <li>The two year comparison shows 2015 with a higher CTR than 2014.</li> <li>2014 had a CTR of 0.63% and 2015 resulted in a CTR of 0.74% - this is 16.56% increase.</li> </ul>
Magazine	Content targeting business and metro area customers.	844,200 impressions
Out of Home/Transit	Supports the broadcast and print media while increasing awareness.	36,144,583 impressions
Event Sponsorships	Reaches consumers at popular events and ties the <i>wattsmart</i> messaging to positive activities.	12,695,382 impressions

The total number of 2015 impressions for the wattsmart campaign was 97,471,153.

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

## Public Outreach

The Company leveraged the messages initially developed in the communications campaign through various public outreach initiatives in 2015. Table 3 summarizes the Company's efforts to educate the public on the importance of implementing energy efficiency practices.

**Table 3 – Outreach Initiatives** 

Initiative	Description
Act wattsmart Video Contest	On March 6, 2015, the Company launched the statewide Act
	wattsmart video contest at the Home and Garden Festival.
	Customers could submit videos between March 6 and May 17,
	2015. People's Choice voting was held from May 18 through

Initiative	Description	
	May 31, 2015, with winners announced on June 17, 2015.	
	A summary of the results:	
	• 220 registrations	
	• 53 customers entered videos into the contest	
	<ul> <li>The videos received 5,232 votes</li> </ul>	
	• The videos received more than 20,000 views	
	<ul> <li>Web traffic on wattsmart.com increased by 525 percent during the contest period.</li> </ul>	
	The contest delivered more than 13 million media	
	impressions. Launch coverage included all market TV	
	stations and 3 radio interviews. Winner announcement	
	coverage included 5 TV interviews, 5 radio interviews	
	and all major newspapers. Resulted in positive	
	coverage using <i>watt</i> smart messages/tips in all earned	
Salt Lake Real	media opportunities.  This sponsorship aligns well with the Company's summer	
Sait Lake Keai	cooling messages. Ads occurred:	
	Preseason – February	
	Regular season - March – October	
	Playoffs	
	- Thayons	
	Included in sponsorship – about 19, 000 fans per game	
	Television (for all local Team-controlled broadcasts)	
	<ul> <li>In-game television broadcast :30 spot</li> </ul>	
	<ul> <li>In-game television open and close billboard</li> </ul>	
	Radio	
	o :30 pre-game spot	
	o :30 in-game spot	
	Online - rotating banner ad on RealSaltLake.com	
	• Signage	
	One minute LED Ribbon Board per home game	
	<ul> <li>Video board feature for Man of the Match</li> </ul>	
	The Real made the playoffs in 2015, resulting in additional	
University of Utah	promotional opportunities during this time.	
University of Utah	The Company continued to utilize the "save your energy for the game" video to play at all home football and men's	
	basketball games when the team is announced.	
	busiceour guines 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):	
	• Video Board Feature - :30 TV spot.	
	CGN Network - :30 TV spot ran on all TVs located in	

Initiative	Description
	the suites; 4 full screen spots and 18 panel
	advertisements (logo graphics).
	<ul> <li>South, North and Pro-ad LED Boards: "Save your</li> </ul>
	energy for the game" LED display.
	<ul> <li>Radio - :30 spot ran once during each broadcast of the official pre-game show and one spot during the official post-game show (approx. 12 spots). Additionally, :10 live reads during broadcast.</li> <li>Basketball (17 home games – about 10,000+ fans per game):</li> </ul>
	<ul> <li>Video Board Feature - :30 TV spot.</li> </ul>
	<ul> <li>CGN Network - :30 TV spot ran on all TVs located in the suites; 4 full screen spots and 18 panel advertisements (logo graphics).</li> </ul>
	Baseline LED Boards - "Save your energy for the game" LED display.
	• Radio - :30 spot ran once during each broadcast of the official pre-game show and one spot during the official post-game show (approx. 30 spots). Additionally, : 10 live reads during broadcast.
	Gymnastics (6 home meets – about 14,000 fans per meet):
	<ul> <li>Baseline LED Boards - "Save your energy for the game" LED display.</li> </ul>
	Football and basketball made the playoffs in 2015, resulting in additional promotional opportunities during these events.
Rockin' wattsmart School	Six assemblies were conducted at 3 schools:
Assemblies	<ul> <li>Daybreak Elementary, South Jordan</li> </ul>
	<ul> <li>Copper Hills Elementary, Magna</li> </ul>
	Marlon Hills Elementary, Ogden
	Overall, each of the assemblies helped to spread the <i>watt</i> smart message and received positive feedback from the school
	principal. The presenters saw that there was a significant
	improvement in gaining the attention of the students with
	modified presentations for each grade group. These
	modifications helped keep the students focused on the topic.
	The following were modifications that were made to each of the grade presentations:
	<ul> <li>Modifications made for first through third graders:</li> <li>Simplified the vocabulary and concepts used for energy, electricity, energy-efficiency.</li> <li>Added more animated and hands-on activities</li> </ul>
	(60 dance moves in 60 seconds, Slim video

Initiative	Description		
	<ul> <li>quiz, etc.).</li> <li>Modifications made for fourth through sixth graders:</li> <li>Created age appropriate activities to coincide with the curriculum (wattsmart or Not Smart game instead of Slim Video quiz, allowing it to be more student focused during question and answering).</li> <li>Changed the music to reflect the interest of this particular age group.</li> <li>Slim participated with the students in a more age appropriate way (Example, Six Dance Moves in 60 Seconds with students introducing their own age appropriate dance moves, having the students (instead of the teachers) participate in the freeze dance).</li> </ul>		
KUED	Weekly sponsorship of children's programming. These included quick tips from Slim the Lineman on how to be <i>watt</i> smart.		
Ragnar Relay	The Company's <i>watt</i> 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 <i>watt</i> smart giveaways including sunscreen and buffs. This allowed them to engage other runners during the 192 mile event.		
Game Show Network	Custom Game Hub Sponsorship  Geo Targeted to Select Utah service area  Desktop, tablet & mobile  Companion banner ads direct to watt smart.com  Custom Rocky Mountain Power Game Hub which included  RMP - Utah custom Spot the Difference  link to Facebook site  Video pre-roll unit  "Tips to Save"  Campaign over-delivered and had only positive feedback.		
	Players loved the custom <i>Spot the Difference</i> Game, they also enjoyed the games that were in the hub and surrounded by Company imagery. Players continually return to the game to try and beat their scores and learned many energy saving tips.		
Education	The Company offers a "Be <i>watt</i> smart, Begin at Home" school education program through the National Energy Foundation ("NEF"). The program is designed to develop a culture of		

Initiative	Description
	energy efficiency among teachers, students and families. The centerpiece is a series of one hour presentations with hands-on, large group activities for 5 <sup>th</sup> 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.
	Presentations are based on state education guidelines. In fall 2015, nearly 12,000 Utah students participated in the curriculum, which includes 130 schools taught by 447 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 10, 2015. The Company had a booth positioned beside the McDonald's Stage providing the <i>watt</i> smart message to nearly 20,000 attendees. Company representatives spoke to attendees about being <i>watt</i> smart. The sponsorship also included 120, 30-second spots on Telemundo and inclusion of a minimum of 100 promotional announcements.

#### wattsmart Business advocacy

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

The Company partnered with the Salt Lake Chamber to provide energy efficiency and *watt*smart Business content for twice-monthly Utah Business Report radio segments presented weekdays on KSL. Content was created for social media posts about *watt*smart 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. In 2015, the Company launched the *watts*mart Starter Kit offering for Utah customers with a news release, newsletter article, direct mail, website, and social media content.

Home Energy Savings program staff attended the Salt Lake Tribune's Home and Garden Festival March 6-8, 2015, 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. More than 750 customers used the coupon or the online coupon code. Program representatives gave away 300 wattsmart Starter Kits to customers at the show. Festival attendees were interested in LED lighting, air conditioning systems and insulation. Some customers inquired with program staff about Home Energy Reports.

In April 2015, the Company promoted specially priced LED bulbs and wattsmart Starter Kits. The offer was communicated through email, the website and social media.

Messaging shifted to cooling as summer approached. The Company began the season by providing educational content about evaporative coolers, how they work and the benefits of this highly efficient technology via the website and social media.

Program staff also attended the Deseret News Home Show October 9-11, 2015, to help educate customers on energy efficiency and *watt*smart program incentives. Total attendance at the fall home show was 24,079, an increase of 8 percent from 2014. Program representatives estimated 159 online admission coupon redemptions.

In 2015, program communications delivered approximately 1,587,000 impressions. A breakdown of estimated impressions by channel is shown in Table 4 below. These estimates do not reflect all of the customer, retailer and trade ally touchpoints.

**Table 4 – Impressions by Channel** 

	···· J - ···
	2015 Estimated
Communications Channel	Impressions
Bill inserts	1,565,000
Direct mail	22,200

## Refrigerator Recycling ("See ya later, refrigerator®")

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

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

#### Home Energy Reports

Home Energy Reports were mailed to the about 275,000 customers several times throughout 2015. Many of these 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.

In May 2015, reports included a promotion on Cool Keeper and the benefits of participation.

In September 2015, a random group of *Home Energy Reports* customers were asked to provide feedback about the program through a telephone survey conducted by Opower. Research findings indicate the majority of report recipients are happy with the program. High level results are provided below:

- 74 percent of recipients "like" the Home Energy Reports.
- 46 percent of recipients discuss the reports with people in their household.
- Of the 85 percent of customers who are familiar with the reports, 80 percent find the tips included on the reports helpful.

#### New Homes

The *New Homes* program encourages home builders to incorporate energy efficient measures in the homes they build primarily through training, outreach and support.

The program leverages partnerships with the following types of organizations:

- Local Home Builder Association offices,
- Utah Building Energy Efficiency Strategies,
- Other organizations, such as Utah Clean Energy, US Green Building Council and American Institute of Architects.

## Cool Keeper

Cool Keeper outreach was primarily completed by trained program representatives who visited homes to educate prospective customers about the program and encourage enrollment. Rocky

Mountain Power call center agents also provided brief information about the program to Utah customers when they called in for service requests and other inquiries.

#### wattsmart Business

During 2015, *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 communications encouraged business customers to make energy efficiency upgrades and print ads featured case study examples from program participants which were repurposed in social media. Quarterly eblasts directed viewers to the company's website, 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.

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

Three businesses were award the "wattsmart 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 *watts*mart "open sign" for businesses and approved vendors to display. Customers were photographed with the open sign and the photos were used in the videos, print advertising, case studies, newsletter articles, trade shows, and Facebook.

Irrigation mailings occurred in Utah during April and November 2015, with approximately 1,800 customers in each mailing. The letter included irrigation incentive information and an application.

During 2015, the program garnered 19,905,327 impressions. Breakdown of impressions by media type is shown in Table 5 below.

**Table 5 – Impressions by Media Type** 

<b>Communications Channel</b>	Impressions			
Radio	12,515,600			
Newspaper	4,993,002			
Magazine	497,700			
Digital display	1,748,576			
Search	39,519			

<b>Communications Channel</b>	Impressions			
Bill insert	54,279			
Eblast	53,054			
Irrigation direct mail	3,600			
<b>Total Impressions</b>	19,905,327			

## **Outreach Campaign Budget Results**

The 2015 budget for outreach activities was \$1,620,081, as presented in Table 6 below. Expense activities are summarized by the channel of communication.

Table 6 – 2015 Budget, Actuals, and Variance

January - December 2015 Budget		Actuals		Variance		
TV	\$	275,747	\$	275,903	\$	(156)
Radio	\$	134,846	\$	134,034	\$	812
Print	\$	92,664	\$	93,078	\$	(414)
Outdoor/Transit	\$	67,238	\$	67,302	\$	(64)
Digital/Online	\$	154,556	\$	154,325	\$	231
Creative/Production/Planning	\$	250,000	\$	249,300	\$	700
Media pitches/ Event Support						
PR/Public Affairs	\$	41,000	\$	40,969	\$	31
Energy Efficiency Mobile Game	\$	55,555	\$	65,000	\$	(9,445)
wattsmart assemblies <sup>1</sup>	\$	20,000	\$	19,513	\$	487
wattsmart Business advocacy						
program	\$	100,000	\$	100,235	\$	(235)
2015 Video Contest	\$	100,000	\$	100,078	\$	(78)
Sponsorships (KUED, Real, and						
Ragnar)	\$	76,750	\$	57,498	\$	19,252
University of Utah sports						
sponsorship <sup>2</sup>	\$	55,555	\$	65,222	\$	(9,667)
Be wattsmart, Begin at Home school						
education program (NEF)	\$	150,000	\$	152,607	\$	(2,607)
U of U Student Energy Ambassador	\$	9,221	\$	-	\$	9,221
Multicultural outreach	\$	15,000	\$	14,111	\$	889
Research	\$	22,000	\$	21,700	\$	300
Total	\$	1,620,081	\$	1,610,874	\$	9,207

<sup>1.</sup> The original vendor went out of business. We switched vendors and the new vendor was more expensive.

<sup>2.</sup> Football and basketball made it into the playoffs. We incurred \$8,888.88 and \$777.77 in additional charges for playoffs.

#### **Table 7 – Exhibits**

Exhibit A	2015 Energy Efficiency Questionnaire
Exhibit B	Energy Efficiency Study
Exhibit C	Customer Awareness Advertising Campaign Research
Exhibit D	Be wattsmart, Begin At Home Utah Program 2015 Report
Exhibit E	Creative and New Stories
Exhibit F	2015 Act wattsmart video contest Recap
Exhibit G	Video Contest Placements 2015
Exhibit H	GSN Game Recap presentation
Exhibit I	2015 Digital Report

## Exhibit A

## 2015 Energy Efficiency Questionnaire

## **Rocky Mountain Power** 2015 Energy Efficiency Questionnaire – FINAL

Date: 10 September 2015 Universe: General public, Rocky Mountain Power service areas Utah

Sample size: 500 Rocky Mountain Power residential customers

Screener: Head of household, most likely to contact utility company

Objective: Measure the public's awareness and affinity for energy conservation programs

with VuPoint Research, an independent research firm. I'm calling on behalf of Rocky Mountain Power. We are conducting a survey regarding their services and programs. May I speak to one of the heads of your household?

As needed: This survey usually takes about \_\_\_\_ minutes.

We are only interested in your opinions. We are not selling anything.

- S<sub>0</sub> Gender (DO NOT ASK. CODE FROM OBSERVATION)
  - 1 Male (QUOTA: 250)
  - 2 Female (QUOTA: 250)

We have a few questions to start to make sure we are talking to the right people

- Q1 [Screener 1] Is Rocky Mountain Power your electricity provider? (NOTE: SAMPLING QUOTA WILL ASSURE 500 IN THE RMP DATASET)

  - 2 No (THANK & TERMINATE)
  - 3 Refuse (DNR - THANK & TERMINATE)
- Q2 [Screener 2] Are you a person in your household who is likely to make decisions about your household participating in services offered by Rocky Mountain Power?
  - 1 Yes
  - 2 No (THANK & TERMINATE)
  - 3 Refuse (DNR – THANK & TERMINATE)
- Q3 Do you own or rent your home?
  - 1 Rent (QUOTA: 150)
  - 2 Own/ buying (QUOTA: 350)
  - 3 Other
  - 4 Refuse (DNR)
- Q4 What is your age category?
  - 1 18 to 24 (QUOTA: 10)
  - 2 25 to 34 (QUOTA: 120)
  - 3 35 to 44 (QUOTA: 75)
  - 45 to 54 (QUOTA: 95) 4
  - 5 55 to 64 (QUOTA: 95)
  - 6 65 or over (QUOTA: 105)
  - Refuse (DNR)

A-1 2015 MDC Research

Q5	What	is your HIGHEST LEVEL OF EDUCATION that you have had the opportunity to complete?
	11 12 13 14 15 16 98	Less than High School (QUOTA: 62) High School Degree (QUOTA: 123) Some College (QUOTA: 185) College Degree (QUOTA: 90) Some Graduated Study (QUOTA: 20) Post-Graduate Degree or Higher (QUOTA: 21) Prefer not to say
Q6	How in	nportant is it for utility companies to offer customers programs to help conserve energy?
	1 2 3 4 7	Not at all important Not very important Somewhat important Very important Don't know (DNR)
Q7	In the energy	past year, have you taken any actions or changed anything in your household to save /?
	1 2 3	Yes No (SKIP TO Q10) Refuse (DNR – SKIP TO Q10)
Q8		S ON Q7: What actions have you taken in your home in order to save energy? (UNAIDED. E. MARK ALL MENTIONED).
	11 12 13 14 15 16 17 18 19 20 21 22 99	Add insulation to your attic, roof, or walls Adjust thermostat Generally conserve or use less energy Install an energy-efficient air conditioner or furnace Install energy-efficient appliances Install energy-efficient doors or windows Insulate or caulk around windows or doors Insulate water heater, pipes, or air ducts Tune up your furnace or water heater Turn off lights when leaving a room Unplug appliances when away from home Use energy-saving light bulbs Other (SPECIFY) Don't know
Q9		S ON Q7: What are the main reasons you took steps to conserve energy in your home? DED. PROBE. MARK ALL MENTIONED)
	11 12 13 14 15 16 17 99	To protect the environment To reduce need for new energy infrastructure To save money Heard ads encouraging energy conservation To make my home more comfortable Needed to replace an old or broken appliance To take advantage of a rebate or tax credit Other (SPECIFY) Don't know/ none

Q10 Now I'd like you to think about some specific energy saving measures. For each, please tell me if your household is *not at all likely, not very likely, somewhat likely,* or *very likely* to do it in the next year. If it is something you already do or have already done, please let me know. **[ROTATE]** 

	Not at all likely	Not very likely	Somew hat likely	Very likely	Already done /do	Don't know (DNR)
Add insulation to your attic, roof, or walls	1	2	3	4	5	7
Adjust thermostat	1	2	3	4	5	7
Do laundry only if there is a full load	1	2	3	4	5	7
Generally conserve or use less	1	2	3	4	5	7
Install an energy-efficient air conditioner or furnace	1	2	3	4	5	7
Install energy-efficient appliances	1	2	3	4	5	7
Install energy-efficient doors or windows	1	2	3	4	5	7
Insulate or caulk around windows or doors	1	2	3	4	5	7
Insulate water heater, pipes, or air ducts	1	2	3	4	5	7
Tune up your furnace or water heater	1	2	3	4	5	7
Turn off lights when leaving a room	1	2	3	4	5	7
Unplug appliances when away from home	1	2	3	4	5	7
Use energy-saving light bulbs	1	2	3	4	5	7

- Q10 Are you aware of any programs offered by Rocky Mountain Power to help you save energy or lower your utility bills?
  - 1 Yes
  - 2 No (SKIP TO Q13)
  - 3 Don't know (DNR SKIP TO Q13)
- Q11 IF YES ON Q10: From what you know or have heard, what is it that these programs ask people to do? (UNAIDED)

RESPONSES TO BE TYPED AND CODED

- What energy efficiency or conservation <u>programs</u> are you aware of from Rocky Mountain Power? Please name as many as you can think of. (UNAIDED. PROBE. MARK ALL MENTIONED) (INTERVIEW NOTE: If a correct program definition is mentioned, mark the program as mentioned. See the PROGRAM DEFINITION sheet for more info.)
  - 11 **Cool Cash Incentive** (DNR: Rocky Mountain Power's effort to promote energy-efficiency and conservation and to educate customers on saving money on their utility bills)
  - 12 **Cool Keeper** (DNR: Rocky Mountain Power installs a device that turns the air conditioner unit on and off in 15-minute segments during summer peak-usage hours.Participants receive a \$20 credit each year.)
  - wattsmart New Homes (DNR: A program to promote certified, energy-efficient, new home construction.)
  - 14 **Federal Tax Credits** (DNR: A program to promote certified, energy-efficient, new home construction.)
  - Home Energy Analysis (DNR: A program to self-audit or web-audit homes by following Rocky Mountain Power's recommendations on efficient upgrades.)
  - Home Energy Savings (DNR: Rocky Mountain Power offers cash incentives to customers who buy energy-efficient electrical appliances and make other energy improvements for their home.)
  - 17 **See Ya Later, Refrigerator** (DNR: Rocky Mountain Power picks up and recycles your old working refrigerator or freezer. Participants receive \$30.)
  - Time of Day (DNR: A Rocky Mountain Power program that lets customers sign up to pay for electricity depending if it is used during on-peak or off-peak hours.)
  - wattsmart (DNR: Rocky Mountain Power's effort to promote energy-efficiency and conservation and to educate customers on saving money on their utility bills.)
  - ThermWise (DNR: ThermWise Home Energy Plan, Thermwise Appliance Rebates, ThermWise Weatherization Rebates, all Questar efforts to promote energy efficiency.)
  - 99 Other (SPECIFY \_\_\_\_\_)
  - 88 None
- Q13 Are you aware that Rocky Mountain Power provides a report that compares your electrical usage to your neighbor's usage?
  - 1 Yes
  - 2 No
- Q14 IF YES IN Q13, ASK: Has your household received this Rocky Mountain Power report that compares your electrical usage to your neighbor's usage?
  - 1 Yes
  - 2 No
- Q15 IF YES IN Q14, ASK: Have you changed any way that your household uses electricity as a result of receiving this report?
  - 1 Yes
  - 2 No

Q16 IF UNAWARE OF REPORT IN Q13 Rocky Mountain Power produces at-a-glance reports showing how your energy usage compares to the energy usage of your neighbors who live in similarly sized homes.

How interested would you be in receiving these reports?

- 1 Not at all interested
- 2 Not very interested
- 3 Somewhat interested
- 4 Very interested
- 7 Don't know (DNR)

ASK ALL: Now I'm going to read some descriptions of energy efficiency programs offered by Rocky Mountain Power. For each, please let me know if you were aware of it before this call. And, if so, if you have ever participated in the program. (RANDOMIZE Q17-Q23)

- Q17 <u>Cool Keeper:</u> Rocky Mountain Power installs a device that turns the air conditioner unit on and off in 15-minute segments during summer peak-usage hours. Participants receive a \$20 credit each year. (AS NEEDED: Would you say you are ...?)
  - 1 A current participant
  - 2 A past participant
  - 3 Aware of, but never participated
  - 4 OR, have never heard of it before
  - 7 Don't know (DNR)
- Q18 <u>wattsmart New Homes</u>: A program to promote certified, energy-efficient, new home construction. (AS NEEDED: Would you say you are ...?)
  - 1 A current participant
  - 2 A past participant
  - 3 Aware of, but never participated
  - 4 OR, have never heard of it before
  - 7 Don't know (DNR)
- Q19 <u>Federal Tax Credits</u>: A program for an income tax credit for purchasing energy-efficient home products. (AS NEEDED: Would you say you are ...?)
  - 1 A current participant
  - 2 A past participant
  - 3 Aware of, but never participated
  - 4 OR, have never heard of it before
  - 7 Don't know (DNR)
- Q20 <u>Home Energy Savings</u>: Rocky Mountain Power offers cash incentives to customers who buy energy-efficient <u>electrical</u> appliances and make other energy improvements for their home (e.g. insulation, new energy-efficient windows, etc.) (AS NEEDED: Would you say you are ...?)
  - 1 A current participant
  - 2 A past participant
  - 3 Aware of, but never participated
  - 4 OR, have never heard of it before
  - 7 Don't know (DNR)

Q21		<u>ater, Refrigerator</u> : Rocky Mountain Power picks up and recycles your old working tor or freezer. Participants receive \$30. (AS NEEDED: Would you say you are?)
	1 2 3 4 7	A current participant A past participant Aware of, but never participated OR, have never heard of it before Don't know (DNR)
Q22	dependii	Day: A Rocky Mountain Power program that lets customers sign up to pay for electricity ng if it is used during on-peak or off-peak hours. (AS NEEDED: ON-PEAK: Monday – om 1:00 – 8:00 p.m. and OFF PEAK: all other hours). (AS NEEDED: Would you say you
	1 2 3 4 7	A current participant A past participant Aware of, but never participated OR, have never heard of it before Don't know (DNR)
Q23		rt: Rocky Mountain Power's effort to promote energy-efficiency and conservation and to customers on saving money on their utility bills. (AS NEEDED: Would you say you are?)
	1 2 3 4 7	A current participant A past participant Aware of, but never participated OR, have never heard of it before Don't know (DNR)
Q24		RE UNAIDED OR AIDED OF <u>ANY</u> PROGRAM: Where did you first see or hear about these avings programs? (UNAIDED. MARK ALL MENTIONED)
	11 12 13 14 15 16 17 18 19 20 21 22 99 97	Contractor Direct mail from utility company Family/ friend/ neighbor Home-appliance dealer Home-improvement retailer (i.e. Lowe's, Home Depot) Newspaper Radio/ radio ad TV ad/ public service announcement TV news Utility bill insert Website: Rocky Mountain Power Website: Other Other (SPECIFY) Don't know

Q25	that wou	How interested do you think you or someone in your household would be in using a free online tool that would allow <u>you</u> to perform your own home energy assessment? Please use a 1-5 scale. One means <i>not at all interested</i> . Five means <i>very interested</i> .							
	1 2 3 4	Not at all interested							
	5 7	Very interested Don't know (DNR)							
Q26		nat you know or have heard, how concerned is Rocky Mountain Power about conserving Please use a 1-5 scale. One means <i>not at all concerned</i> . Five means <i>very concerned</i> .							
	1 2 3 4	Not at all concerned							
	5 7	Very concerned Don't know (DNR)							
Q27		ncerned do you think Rocky Mountain Power is about finding ways to keep their rates as low ble? Please use a 1-5 scale. One means not at all concerned. Five means very concerned.							
	1 2 3 4	Not at all concerned							
	5 7	Very concerned Don't know (DNR)							
Q28		ncerned do you think Rocky Mountain Power is about helping customers save money saving energy? Please use a 1-5 scale. One means <i>not at all concerned</i> . Five means <i>very ed</i> .							
	1 2 3 4	Not at all concerned							
	5 7	Very concerned Don't know (DNR)							

Q29	Now, if you wanted to know more about energy efficiency and home energy savings, rebates and/or products, where would you look for information? (UNAIDED. MARK ALL MENTIONED)							
	12 C C C C C C C C C C C C C C C C C C C	A home builders association Contractor Federal government Home appliance dealer Home improvement retailer like Lowe's or Home Depot Internet search (e.g. Google, Yahoo) Internet (SPECIFY) Questar Gas Rocky Mountain Power State Department of Energy Vebsite: Questar Gas Vebsite: Rocky Mountain Power Vith the power/gas bill Other (SPECIFY) Don't know						
Q30		e of the following would you most likely turn to first for energy-efficiency information? EWER NOTE: READ "QUESTAR GAS" FIRST ON EVERY OTHER SURVEY.)						
	2 G 3 H 4 S 5 F 9 G	Rocky Mountain Power Questar Gas Home improvement retailer State Department of Energy Federal government Other (VOL – SPECIFY) Don't know (DNR)						
Q31	communic	he following do you think is the most effective way for your utility companies to rate how to lower energy usage and save money on your utility bills? (RANDOMIZE)						
	2 N 3 E 4 U 5 A 6 A 9 C	An insert that comes with your utility bill Newspaper, radio, or TV ads Direct mail, separate from your utility bill Utility company Website An email from the company A phone call from a company representative Other (DO NOT READ – SPECIFY) Don't know (DO NOT READ)						

We are about done. There are just a few more questions to help us categorize your responses...

Do you follow any of these sports teams by attending their games, listening to their games on the radio or watching their games on TV? (READ EACH TEAM. ROTATE TEAMS)

		Yes	No
Q32	Salt Lake Bees	1	0
Q33	Utah Jazz	1	0
Q34	Real Salt Lake	1	0
Q35	University of Utah	1	0
Q36	Utah State University	1	0
Q37	Brigham Young University	1	0
Q38	Weber State	1	0

Q39 What is your favorite sport to attend in person, listen to on the radio or watch on TV? (UNAIDED). PROBE. MARK ONLY ONE FAVORITE).

- 11 Basketball
- 12 Baseball
- 13 Football
- 14 Soccer
- 15 Skiing
- 16 Golf
- 17 Ice hockey
- 18 Gymnastics
- 19 Figure skating
- 20 Wrestling
- 21 Tennis
- 22 Auto-car racing
- 99 Other (DNR SPECIFIY) \_\_\_\_

Q39 What is the primary cooling system you have in your home?

- Whole house central air conditioning
- Window air conditioner unit
- 3 Rooftop evaporative cooler (swamp cooler)
- 4 Window evaporative cooler (swamp cooler)
- 9 Other (DNR SPECIFY \_\_\_\_\_)
- 8 None
- 7 Don't know/ refuse (DNR)

Q40 And, what is the primary source of heat in your home?

- 1 Natural gas furnace
- 2 Electric furnace
- 3 Radiator/ heat pump
- 9 Other (DNR SPECIFY \_\_\_\_\_)
- 7 Don't know/ refuse (DNR)

- Q41 Which of the following best describes your annual household income? Please stop me when I mention the right category.
  - 1 Less than \$20,000 (QUOTA: 30)
  - 2 \$20,000 to \$39,999 (QUOTA: 70)
  - 3 \$40,000 to \$59,999 (QUOTA: 95)
  - 4 \$60,000 to \$89,999 (QUOTA: 135)
  - 5 \$90,000 to \$129,999 (QUOTA: 80)
  - 6 \$130,000 to \$199,999 (QUOTA: 30)
  - 7 \$200,000 or more (QUOTA: 10)
  - 8 Don't know/ refuse (DNR) (QUOTA: 10)

That completes our survey. Thank you for taking the time to participate.

## Exhibit B

**Energy Efficiency Study** 



# Utah DSM Customer Research

## Rocky Mountain Power October 2015

#### Prepared by

Jakob Lahmers MDC Research (503) 245-4479

JakobL@mdcresearch.com



## Research Objectives

The Energy Efficiency Study is an ongoing research project sponsored by Rocky Mountain Power in the Utah area. The following research objectives are addressed in the 2015 wave of the study.

#### 1. Customer Behavior:

- What actions do customers take to conserve energy? (Q8)
- What motivates these behaviors? (Q9)
- Likelihood of customers implementing energy conservation measures in the next year? (Q10)

#### 2. Customer Awareness

- Awareness of energy efficiency programs offered by RMP Aided and Unaided (Q10-12 & Q17-23)
- Awareness / Likelihood of participating in the Home Energy Plan (Q13-16)
- Awareness / Interest in online home energy assessment tool (Q25)

#### 3. Customer Perceptions / Communication:

- Perception of utility company's interest in energy conservation and rates (Q26-28)
- Where do customers look for information about energy conservation? (Q29)
- ➤ Where do customers first hear about energy-conservation programs? (Q30)
- What are the best methods for communicating with customers? (Q31)
- What are customer perceptions of the importance of utility companies offering energy-conservation programs? (Q6)

### 4. What energy conservation measures should be implemented?

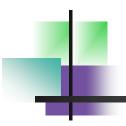
"Q" = Question number in the survey, administered over the phone to Utah residents.

Red = Difference is statistically significant at the 95% level.

Note: In this report, the sample size is n=500, unless otherwise noted on specific charts.

Rocky Mountain Power – Energy Efficiency Study

Utah DSM Survey



## Methodology

- Surveys were administered via phone interviews with 500 Rocky Mountain Power residential customers.
  - ➤ Both cell phones and land-line phones were sampled to ensure an accurate representation of the population.
  - Customers were screened to make sure they meet the following criteria:
    - Utah residents
    - > 18+ years old
    - Household decision maker for electric utility decisions
- Interviews were conducted in order to gather data on the following:
  - Energy-saving behaviors
  - Awareness of energy efficiency programs
  - Preferred avenues of communication
  - > Perceptions of Rocky Mountain Power's priorities and concerns
- Average survey length was ~13 minutes
- Phone survey was in field from September 14 to 25, 2015
- Responses from this year's survey were compared with results from similar surveys in 2014, 2013, and 2012.
  - ➤ They were evaluated for statistically significant differences at the 95% confidence level.
- Rocky Mountain Power performed this study in previous years in conjunction with Questar.
   Questar opted out of the study in 2014, thus changing the wording and comprehension of a few questions. Questions that were likely understood differently prior to 2014 by customers have been noted within the deck.

## Demographic Data

The demographics of the survey respondents generally resembled the actual demographic makeup of Utah. Renters, the 18-24 demographic, and those making less than \$20,000 were underrepresented because they are less likely to be a household decision-maker.

	Utah Demographic	Survey Response
Male/Female	50% : 50%	50% : 50%
Age: 18-24	16%	3%
25-34	23%	25%
35-44	19%	16%
45-54	16%	16%
55-64	13%	18%
65+	14%	21%
Rent/Own	30% / 70%	24% / 75%
Income: Under \$20,000	13%	6%
\$20,000-\$39,999	19%	15%
\$40,000-\$59,999	19%	20%
\$60,000-\$89,999*	27%	20%
\$90,000-\$129,999*	9%	17%
\$130,000-\$199,999*	9%	4%
\$200,000 or more	3%	2%

<sup>\*</sup> Income groupings shown are the groupings used for the survey, which differ from those used in Utah's demographic data. Utah demographic data listed in chart is the closest representation to those groupings.



## **Executive Summary**

#### 1. Behavior

Customers are most likely to plan to save energy by using energy saving light bulbs, turning off lights when they leave the room, or installing energy efficient appliances. The actions they are most likely to be already doing are using energy saving light bulbs, turning off lights when leaving a room, and adjusting the thermostat.

#### 2. Awareness

Since 2012, both aided and unaided awareness of energy efficiency programs have been slowly declining, apart from Time of Day (consistent awareness) and wattsmart (increased awareness).

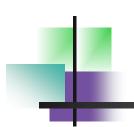
#### 4. Communication

Utility bill inserts and emails are the most effective methods to inform customers about conservation programs. Additionally, customers continue to choose the internet to find more information about the programs.

#### 5. Perceptions

Based on this year's response, customers feel that Rocky Mountain Power is more concerned with keeping rates low and helping customers save money than last year.



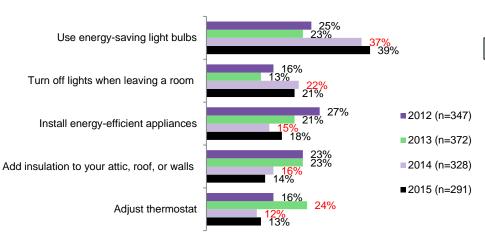


Customers continue to feel that it is somewhat or very important for Rocky Mountain Power to offer energy conservation programs.

Ninety percent of Rocky Mountain Power customers feel it is Very Important or Somewhat Important for utility companies to offer energy conservation programs.



#### **Top 5 Actions Taken to Save Energy**

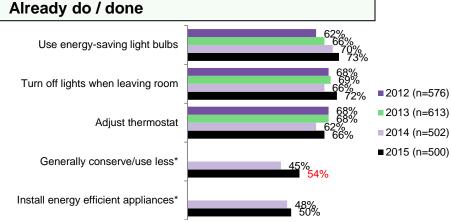


Q6. How important is it for utility companies to offer customers programs to help conserve energy?

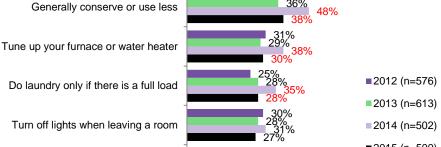
Q8. What actions have you taken in your home in order to save energy? Utah DSM Survey

\*Note: No data available prior to 2014.

#### Top Five in each category



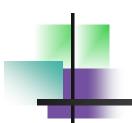
#### Very somewhat or very likely to do in the next year



■2015 (n=500)

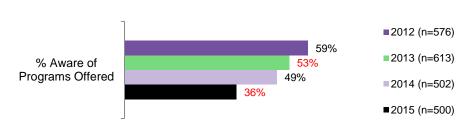
Red indicates significantly different than previous year

Adjust thermostat



Compared to last year, the percentage of customers aware of Rocky Mountain Power energy efficiency programs has decreased significantly.

#### **Energy-Saving Program Awareness**



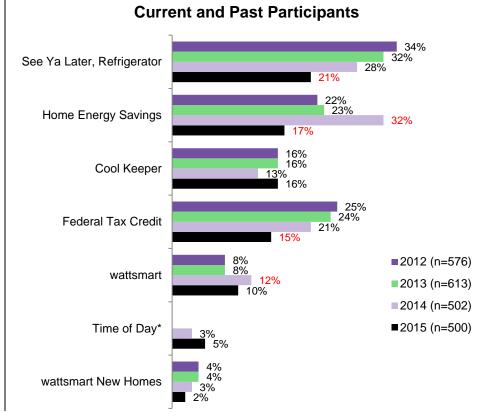
Among those who say they are aware that such programs are offered, ...

Top unaided responses of what they ask residents to do are:

#### 2012--2015

Conserve Energy: (35%, 23%, 15%, 33%) Buy/replace appliances: (18%, 15%, 23%, 17%)

Home temperature/thermostat: (7%, 4%, 6%, 16%)

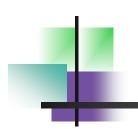


Q10. Are you aware of any programs offered by Rocky Mountain Power to help you save energy or lower your utility bills?

Q11. From what you know or have heard, what is it that these programs ask people to do?

Q17-23. Now I'm going to read some descriptions of energy efficiency programs offered by Rocky Mountain Power. For each, please let me know if you were aware of it before this call. And, if so, if you have ever participated in the program.

8

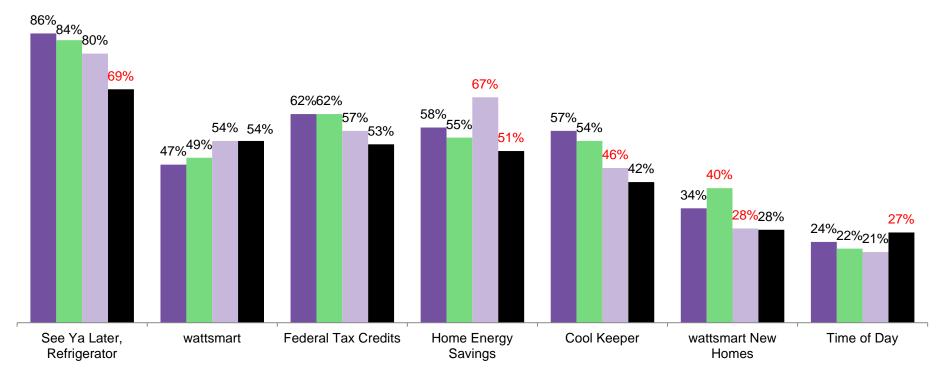


Awareness of all programs except Time of Day decreased in 2015.

#### **Total Awareness of Energy Programs**

(Sum of 1. A current participant, 2. A past participant, 3. Aware of but never participated, and 4. Unaided awareness)





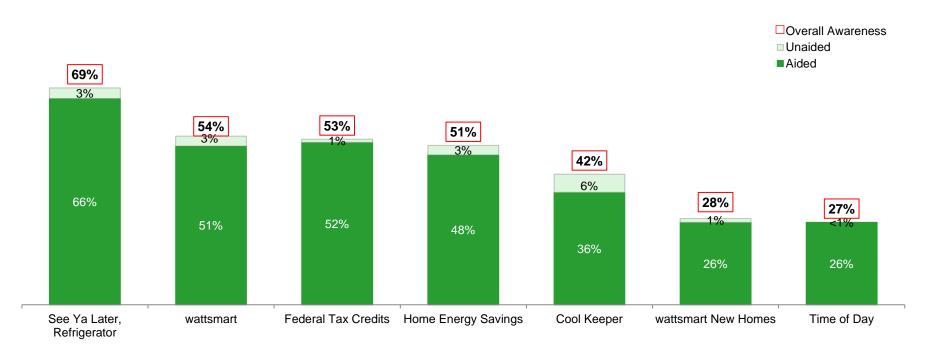
Q12. What energy efficiency or conservation programs are you aware of from Rocky Mountain Power?

Q17-23. Now I'm going to read some descriptions of energy efficiency programs offered by Rocky Mountain Power. For each, please let me know if you were aware of it before this call. And, if so, if you have ever participated in the program.



See Ya Later, Refrigerator enjoys the greatest overall awareness of all Rocky Mountain Power programs.

## Overall Awareness for Rocky Mountain Power Energy Efficiency Programs (2015: Overall Awareness; n=500)



Q12. What energy efficiency or conservation programs are you aware of from Rocky Mountain Power?

Q17-23. Now I'm going to read some descriptions of energy efficiency programs offered by Rocky Mountain Power. For each, please let me know if you were aware of it before this call. And, if so, if you have ever participated in the program.



## Awareness Crosstab Data

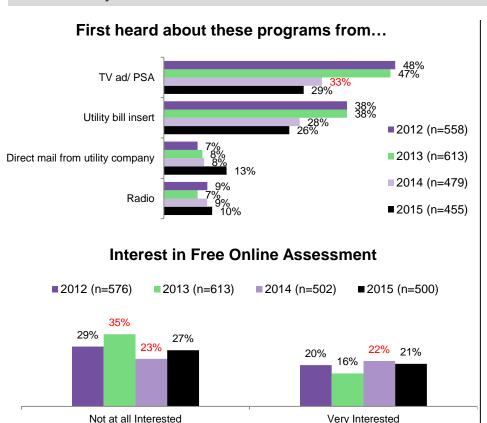
	18 to 24 Years	25 to 34 Years	35 to 44 Years	45 to 54 Years	55 to 64 Years	65 or over	Male	Female
Q12 and Q17-23 Sample Size	13	125	80	79	89	107	250	250
% Aware of Programs Offered	31%	37%	33%	42%	39%	30%	40%	32%
Total awareness of See Ya Later, Refrigerator	15%	58%	59%	72%	83%	84%	65%	74%
Total awareness of Federal Tax Credits	8%	51%	51%	54%	66%	50%	54%	52%
Total awareness of Home Energy Savings	31%	44%	49%	53%	56%	57%	53%	49%
Total awareness of Cool Keeper	23%	35%	39%	41%	49%	50%	41%	42%
Total awareness of wattsmart	46%	53%	48%	58%	58%	53%	53%	55%
Total awareness of wattsmart New Homes	15%	26%	24%	22%	38%	27%	27%	28%
Total awareness of Time of Day	0%	22%	23%	33%	29%	32%	28%	25%

	Less than \$20,000	\$20,000 - \$39,999	\$40,000 - \$59,999	\$60,000 - \$89,999	\$90,000 - \$129,999	\$130,000 - \$199,99	\$200,000 or more
Q12 and Q17-23 Sample Size	32	73	99	101	83	22	11
% Aware of Programs Offered	31%	42%	31%	36%	36%	41%	64%
Total awareness of See Ya Later, Refrigerator	69%	71%	74%	66%	72%	73%	64%
Total awareness of Federal Tax Credits	31%	33%	48%	58%	59%	73%	73%
Total awareness of Home Energy Savings	28%	44%	42%	59%	52%	77%	73%
Total awareness of Cool Keeper	28%	40%	44%	47%	47%	50%	36%
Total awareness of wattsmart	44%	58%	48%	56%	63%	55%	55%
Total awareness of wattsmart New Homes	22%	23%	25%	38%	24%	27%	18%
Total awareness of Time of Day	22%	26%	25%	30%	31%	18%	18%

Q12. What energy efficiency or conservation programs are you aware of from Rocky Mountain Power?



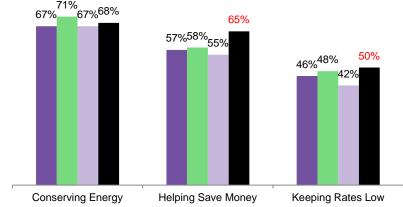
Customers continue to be most likely to first hear about Rocky Mountain Power's energy efficiency programs via TV or Utility Bill Inserts.



The percentage of customers who perceive that Rocky Mountain Power is concerned with Helping Customers Save Money and Keeping Rates Low has increased significantly since 2014.

How concerned is Rocky Mountain Power about...? (Top 2 Box Score)





Q24. Where did you first see or hear about these energy savings programs?

Q25. How interested do you think you or someone in your household would be in using a free online tool that would allow you to perform your own home energy assessment?

Q26. From what you know or have heard, how concerned is Rocky Mountain Power about conserving energy?

Q27. How concerned do you think Rocky Mountain Power is about finding ways to keep their rates as low as possible?

Q28. How concerned do you think Rocky Mountain Power is about helping customers save money through saving energy?

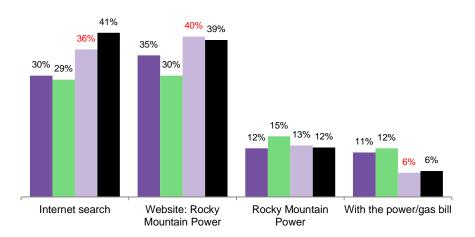


The Rocky Mountain Power website remains the preferred first source for energy efficiency information. Utility bill inserts and emails are perceived to be the most effective means for communication.

Customers say they would turn to a general internet search more often than any other source for energy efficiency information.

## Where would you look for more information regarding home energy savings, rebates, etc...?

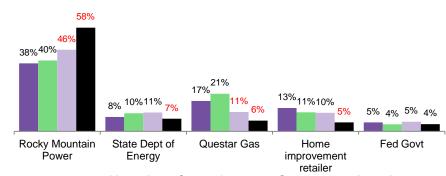




Note: Removal of Questar from survey in 2014 may have affected data.

#### Where would you turn to first for energyefficiency information?

■2012 (n=576) ■2013 (n=613) ■2014 (n=502) ■2015 (n=500)



#### **Most Effective / Preferred Communication**

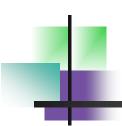
Utility bill inserts and newspaper / radio / TV ads are viewed as the most effective way to communicate how to lower energy usage and to save money.

- Utility bill insert: 34% (down 8% since 2014)
- Email from company: 21% (up 7%)
- Newspaper / Radio / TV ad: 13% (down 7%)
- Direct mail: 13% (up 1%)

Q29. Now, if you wanted to know more about energy efficiency and home energy savings, rebates and/or products, where would you look for information?

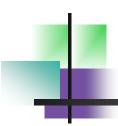
Q30. Which one of the following would you most likely turn to first for energy-efficiency information?

Q31. Which of the following do you think is the most effective way for your utility companies to communicate how to lower energy usage and save money on your utility bills?



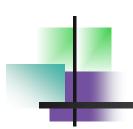
TV advertisements and public announcements are the top ways customers hear about energy saving programs. Females are more likely cite utility bill inserts as a form of awareness.

	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 or over	Male	Female
Q24 Sample Size	9	109	68	78	82	102	226	253
Awareness Source: TV ad/ PSA	44%	23%	31%	27%	37%	32%	27%	32%
Awareness Source: Utility bill insert	0%	20%	25%	21%	27%	39%	22%	31%
Awareness Source: Direct mail from utility company	22%	16%	12%	10%	12%	14%	14%	13%
Awareness Source: Radio/ radio ad	0%	13%	16%	14%	9%	2%	15%	5%
Q8 Sample Size	7	70	56	46	54	52	141	150
Actions Taken: Use energy-saving light bulbs	57%	49%	48%	22%	35%	35%	45%	33%
Actions Taken: Turn off lights when leaving room	29%	16%	23%	24%	17%	23%	20%	21%
Actions Taken: Install energy-efficient appliances	14%	21%	21%	13%	15%	17%	16%	20%
Actions Taken: Add insulation to attic, roof, walls	0%	13%	18%	13%	15%	12%	13%	15%
Actions Taken: Adjust thermostat	29%	13%	16%	13%	7%	12%	16%	10%
Actions Taken: Generally conserve or use less energy	0%	10%	20%	11%	11%	12%	13%	13%
Actions Taken: Energy-efficient air conditioner/furnace	29%	3%	11%	13%	15%	17%	11%	13%
Actions Taken: Install energy-efficient doors/windows	0%	10%	13%	9%	6%	15%	6%	15%



Lower income customers (less than \$40K) are more likely to turn off lights when leaving the room to save energy.

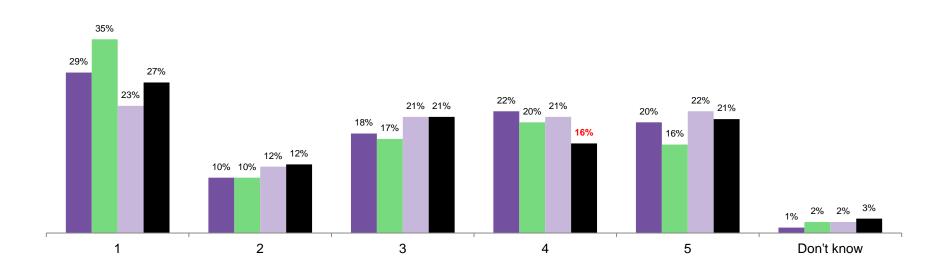
	Less than \$20,000	\$20,000 - \$39,999	\$40,000 - \$59,999	\$60,000 - \$89,999	\$90,000 - \$129,999	\$130,000 - \$199,99	\$200,000 or more
Q24 Sample Size	28	62	92	95	76	20	10
Awareness Source: TV ad/ PSA	21%	26%	38%	24%	36%	30%	20%
Awareness Source: Utility bill insert	25%	27%	18%	24%	21%	40%	20%
Awareness Source: Direct mail from utility company	11%	13%	13%	15%	9%	15%	30%
Awareness Source: Radio/ radio ad	11%	6%	8%	13%	13%	20%	50%
Q8 Sample Size	11	39	62	57	53	17	8
Actions Taken: Use energy-saving light bulbs	45%	41%	32%	37%	42%	47%	25%
Actions Taken: Turn off lights when leaving room	45%	36%	13%	19%	9%	18%	13%
Actions Taken: Install energy-efficient appliances	18%	15%	19%	21%	17%	18%	38%
Actions Taken: Add insulation to attic, roof, walls	27%	13%	11%	11%	21%	18%	13%
Actions Taken: Adjust thermostat	9%	18%	10%	16%	6%	18%	0%
Actions Taken: Generally conserve or use less energy	27%	15%	10%	18%	6%	6%	13%
Actions Taken: Energy-efficient air conditioner/furnace	9%	8%	10%	11%	15%	6%	25%
Actions Taken: Install energy-efficient doors/windows	0%	13%	15%	4%	17%	6%	13%



One in five (21%) are very interested in using a free online tool to perform a home energy assessment, consistent with figures found in 2014.

#### **Interest in Using Free Online Tool**

■2012 (n=576) ■2013 (n=613) ■2014 (n=502) ■2015 (n=500)





## **Conclusions & Recommendations**

#### **Conclusions**

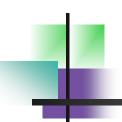
- As shown in past years, customers are driven to conserve energy primarily by the desire to save money. No other reason to conserve compares to this motivation. In 2015, customers were more likely to conserve energy by using energy saving light bulbs than any other method.
- Customers have increased the number of energy saving activities they already do over the past year. In the coming year, fewer people than in 2014 plan to engage in new energy saving efforts.
- General awareness of programs to save energy has decreased significantly since last year, continuing a trend of declining awareness since 2012.
- Utility bill inserts and emails are typically how customers learn about energy conservation programs. To find more information about the programs, respondents overwhelmingly turn to the Internet as the number one source for information.

#### Recommendations

- Show customers the long term financial savings opportunities of investments made in energy conservation programs. Cost savings are the factor most likely to impact behavior change.
- Leverage customers' tendency to turn to the Internet, and more specifically Rocky Mountain Power, for information about energy conservation. Continue efforts to offer an engaging and valuable experience on rockymountainpower.net.
- Consider advertising campaigns designed to promote specific energy conservation programs.
   Awareness of specific programs has been in decline over the past several years, and program awareness, as well as a clear call to action, are crucial in increasing customer engagement in DSM programs.



# Illustrated Results and Findings

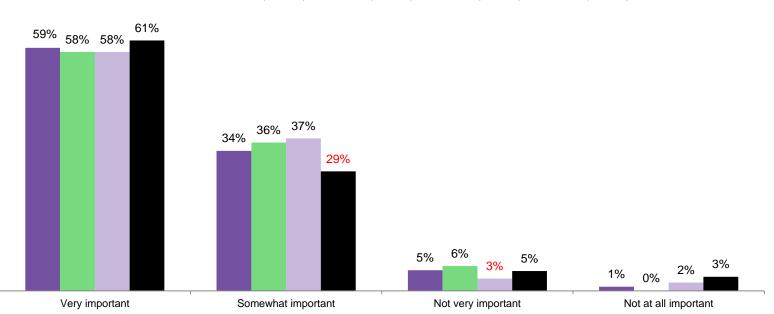


## **Energy Conservation Programs**

Ninety percent of customers feel it is somewhat or very important for utility companies to offer energy conservation programs.

#### **Importance of Utility Energy Conservation Program Offering**



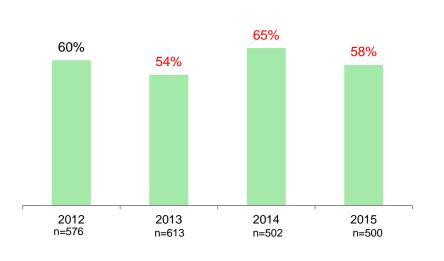




## Action Taken To Conserve Energy

The percent of customers who took actions to conserve energy has decreased significantly in the past year, returning to levels similar to 2012 and 2013.

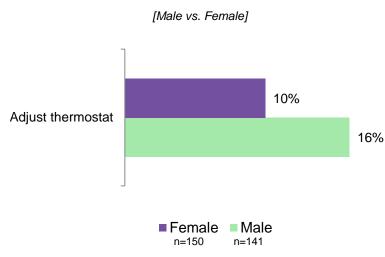
#### **Took Action to Conserve Energy (Yes)**



#### Male vs. Female

Women are slightly less likely than men to adjust the thermostat.

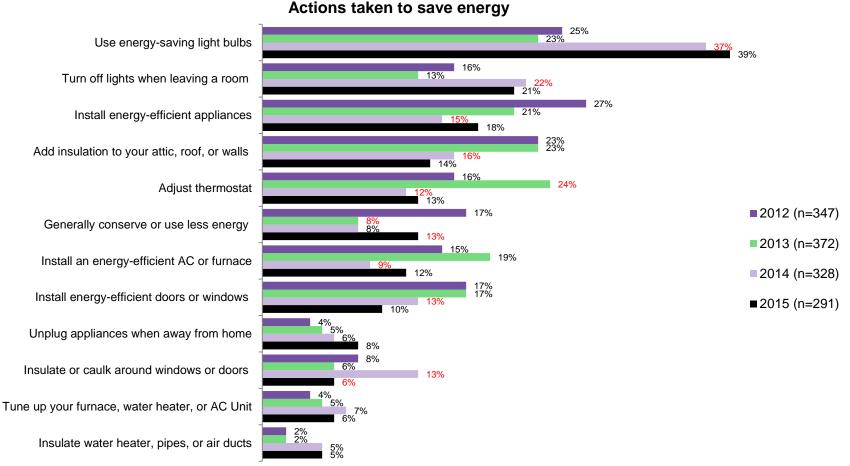
#### **Actions Taken to Conserve Energy**





## Specific Actions Taken To Save Energy

In 2015, customers are most likely to save energy by using energy-saving light bulbs and by turning off the lights when leaving a room. Customers are significantly more likely to generally conserve energy and significantly less likely to add insulation or caulk around doors and windows than in 2014.

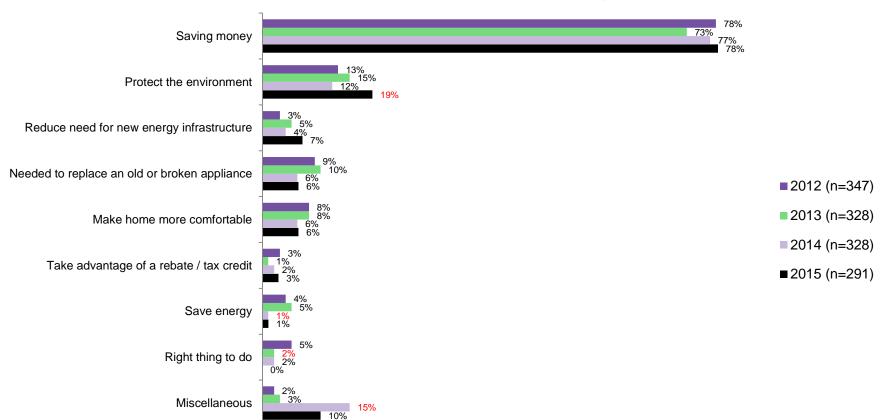




## Reasons to Conserve Energy

Saving money is by far the main reason why customers choose to conserve energy.

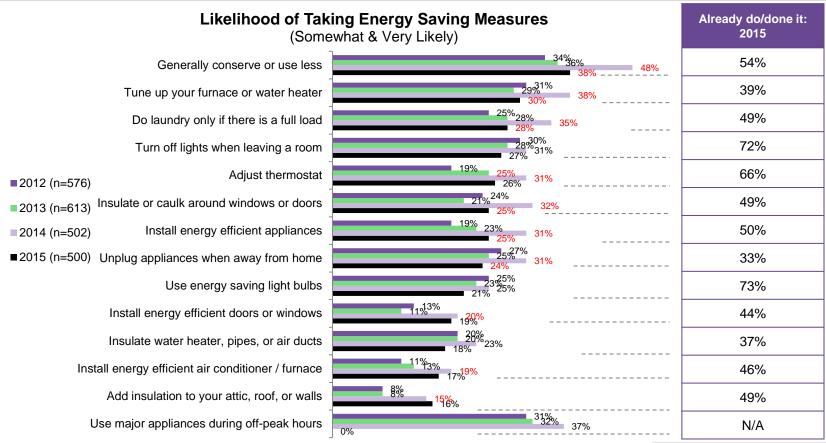
#### **Main Reasons to Conserve Energy**





## Likelihood to Use Energy Saving Measures

Customers state they are most likely to generally conserve or use less energy in the coming year. Use of energy saving light bulbs is the energy saving measure most commonly already in practice.



Q10. Now I'd like you to think about some specific energy saving measures. For each, please tell me if your household is *not at all likely, not very likely, somewhat likely,* or *very likely* to do it in the next year. If it is something you already do or have already done, please let me know

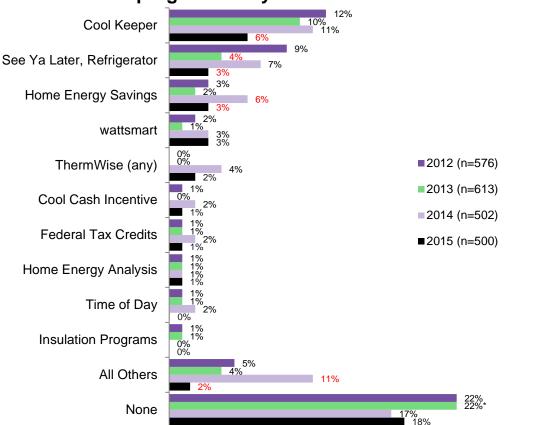
Note: Removed "Using major appliances during off-peak hours" in 2015.

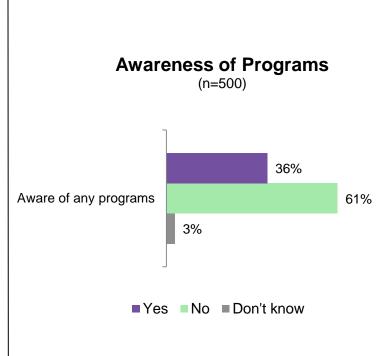


## Program Awareness (Unaided)

Customers have the greatest unaided awareness of the Cool Keeper, See Ya Later, Refrigerator, and wattsmart programs, though unaided awareness of all three is significantly lower than in 2014.

#### What programs are you aware of?

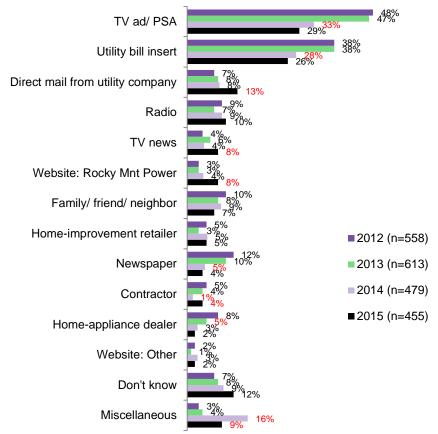






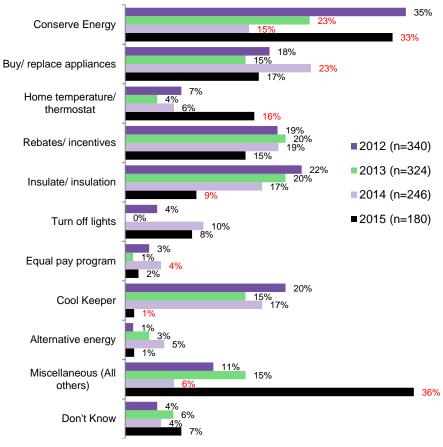
Despite a slight decrease in 2015, customers are still most likely to first see/hear about energy efficiency programs through TV ads and utility bill inserts. Significantly more customers in 2015 believe the energy programs ask you to conserve energy, compared to 2014.

#### Where customer first saw / heard about programs



## Q11. From what you know or have heard, what is it that these programs ask people to do? Q24. Where did you first see or hear about these energy savings programs? Utah DSM Survey

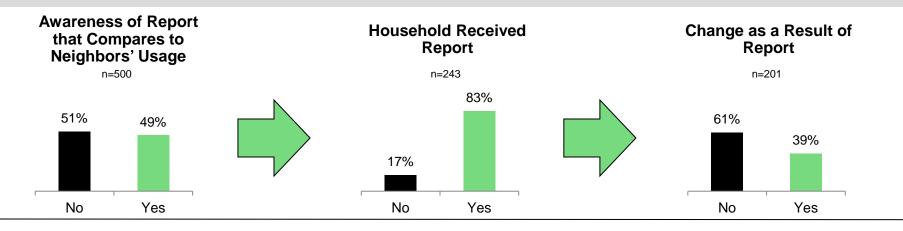
#### These programs ask you to...



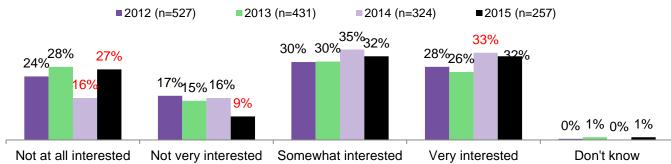


## Home Energy Plan

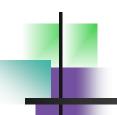
About half of customers are aware of the report. Two thirds of all customers who aren't aware are somewhat or very interested in receiving these reports.



#### **Interest in Receiving Comparative Report**

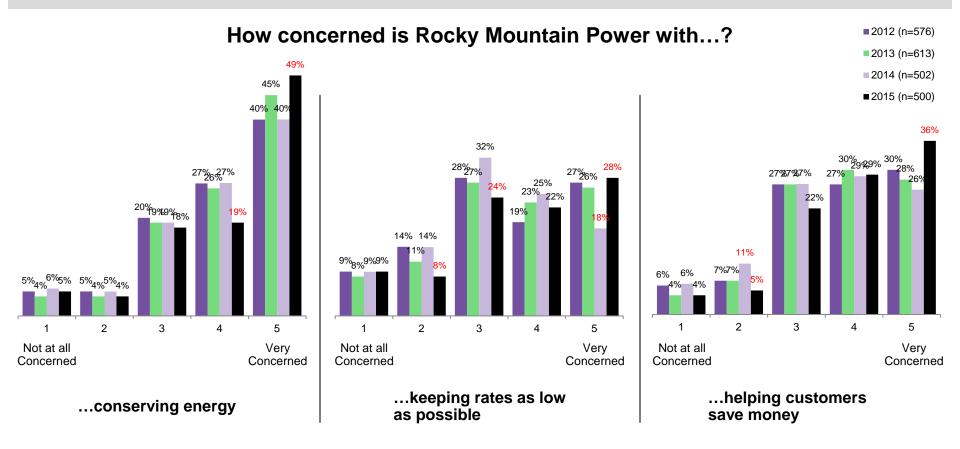


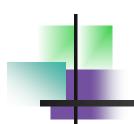
- Q13. Are you aware that Rocky Mountain Power provides a report that compares your electrical usage to your neighbor's usage?
- Q14. Has your household received this Rocky Mountain Power report that compares your electrical usage to your neighbor's usage?
- Q15. Have you changed any way that your household uses electricity as a result of receiving this report?
- Q16. How interested would you be in receiving these reports?



## **Utility Company Perceptions**

Customers viewing Rocky Mountain Power as very concerned with conserving energy, keeping rates low, and helping customers save money have increased significantly since 2014.

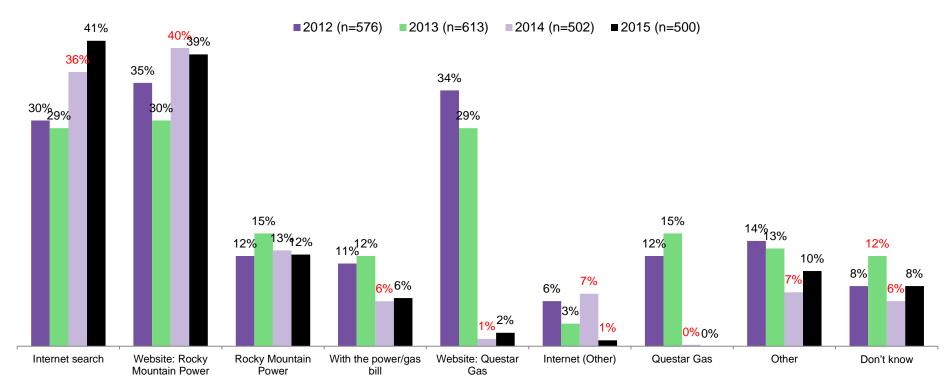




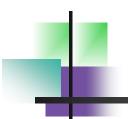
### Communication

Customers are very likely to go online to find more information, most commonly doing a general internet search or looking at the Rocky Mountain Power website.

#### Where to Look for More Information



Note: Removal of Questar from survey in 2014 may have affected data.

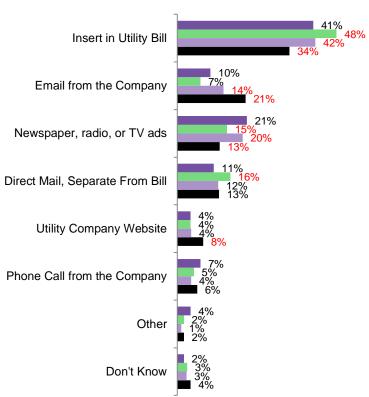


## Sources of Information

Customers are far more likely to turn to Rocky Mountain Power first for energy efficiency information, before any other information source. Likelihood to turn to the Rocky Mountain Power site first has increased compared since last year.

#### Where Customers Turn to First for Information 58% ■ 2012 (n=576) ■ 2013 (n=613) ■ 2014 (n=502) ■ 2015 (n=500) 21% 10% 11% Other Rockv State Dept of Questar Gas Home Fed Govt Don't know Mountain Energy improvement

#### **Most Effective Ways to Communicate**

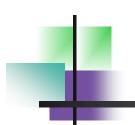


Q30. Which one of the following would you most likely turn to first for energy-efficiency information?

retailer

Q31. Which of the following do you think is the most effective way for your utility companies to communicate how to lower energy usage and save money on your utility bills?

Power



## Sports Fan Behavior

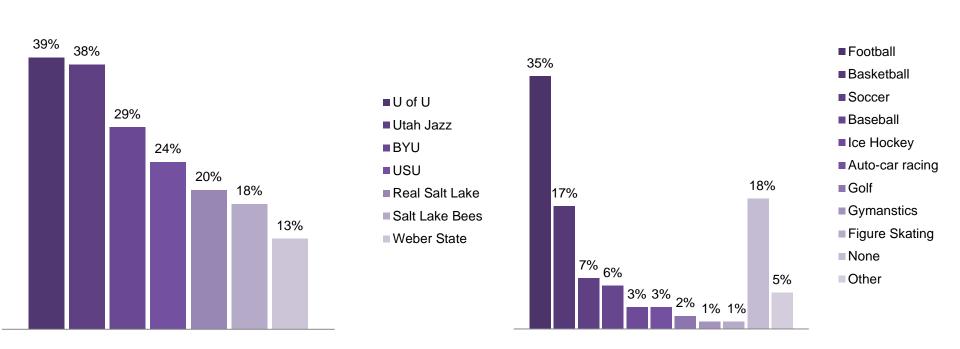
The University of Utah Utes are the most followed sports team in the state of Utah, closely followed by the Utah Jazz. Football is the favorite sport to attend, listen to, or watch by a large margin.

## **Teams Followed by Customers**

(n=500)

#### **Sports Followed by Customers**

(n=500)



Q32-Q38. Do you follow any of these sports teams by attending their games, listening to their games on the radio or watching their games on TV? Q39. What is your favorite sport to attend in person, listen to on the radio or watch on TV?

**Utah DSM Survey** 

## Exhibit C

## Customer Awareness Advertising Campaign Research



# Customer Awareness Advertising Campaign Research

#### Pacific Power and Rocky Mountain Power

Prepared by

Jakob Lahmers MDC Research (503) 245-4479

JakobL@mdcresearch.com



# Research Objectives & Methodology

#### **Objectives**

- The primary objective of the Pacific Power and Rocky Mountain Power Customer Awareness Advertising Campaign Research is to measure the advertisement awareness and effectiveness of the "Let's Turn the Answers On" campaign, which launched in January 2009.
- In addition, this research will help PacifiCorp gauge whether there has been an increase in customer satisfaction and/or company image since the advertising campaign launched.
- This report presents findings for the seventh wave, conducted in May 2015.

#### **Methodology**

- A total of seven hundred (n=713) interviews were conducted with residential customers, evenly divided between Pacific Power and Rocky Mountain Power.
  - The interviews were conducted by telephone between May 21, and June 3, 2015. All participants were interviewed by MDC Research's in-house Research Associates.
  - A list of 50,000 Pacific Power and Rocky Mountain Power residential customers was provided by PacifiCorp.
- All respondents were screened to meet the following criteria:
  - Customer of Pacific Power or Rocky Mountain Power
  - Involved with decisions regarding electric utility
- A proportionate random sampling plan within each utility was utilized:

Pacific Power (n=361)				Rocky Mountain Power (n=352)					
Aware		N	on-Aware	Aware	Aware Non-Aw				
n=208		n=153		n=201		n=151			
Oregon	Washi	ngton	California	Utah	Wyo	ming	Idaho		
n=269	n=	68	n=24	n=279	n=	:47	n=26		

An over sampling of n=138 Washington customers, n=174 Wyoming customers, and n=178 Idaho customers was conducted in order to report on the customer base for each state independently. The Washington, Wyoming and Idaho oversamples are excluded from the primary findings, and covered in separate reports.

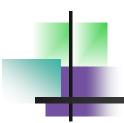


## Methodology (cont.)

- Data were weighted by utility in order to analyze a population proportionate total across all Pacific Power and Rocky Mountain Power customers.
  - The data were weighted to be representative of the customer base (counts provided by PacifiCorp):

Pacific	Power	Rocky Mountain Power				
# of Customers	% of PacifiCorp Total	# of Customers	% of PacifiCorp Total			
726,883	42%	991,601	58%			

- The maximum sampling variability for each customer segment at the 95% confidence level is shown below:
  - Total (n=713) yields a maximum sample variability of +/-3.7% at the 95% confidence level.
  - Pacific Power (n=361) yields a maximum sample variability of +/-5.2% at the 95% confidence level.
  - Rocky Mountain Power (n=350) yields a maximum sample variability of +/-5.2% at the 95% confidence level.
  - Ad Aware (n=409) yields a maximum sample variability of +/-4.8% at the 95% confidence level.
    - Ad Aware by Pacific Power (n=208) yields a maximum sample variability of +/-6.7% at the 95% confidence level.
    - Rocky Mountain Power (n=201) yields a maximum sample variability of +/-6.9% at the 95% confidence level.
  - Ad Non-Aware (n=304) yields a maximum sample variability of +/-5.6% at the 95% confidence level.
    - Ad Non-Aware by Pacific Power (n=153) yields a maximum sample variability of +/-7.9% at the 95% confidence level.
    - Rocky Mountain Power (n=151) yields a maximum sample variability of +/-8.0% at the 95% confidence level.



# **Company & Advertising Awareness**

- All Pacific Power and Rocky Mountain Power residential customers started the survey by mentioning electric utilities that come to mind on an unaided basis:
  - Q1 When you think of electric or gas utilities, what one company comes to mind first? (Unaided company awareness)
- Advertising awareness was measured by asking customers "Q3 During the past six months, from what electric or gas companies do you recall seeing, hearing or reading any form of advertisements or communications?" (Unaided advertising awareness)
- If their electric utility was not mentioned, customers were asked "Q4 During the past six months, do you recall seeing, hearing or reading any form of advertisements or communications from Pacific Power/Rocky Mountain Power?" (Aided advertising awareness)

# Top of Mind Unaided Company Awareness 2015

- Four fifths (83%) of Pacific Power Ad Aware customers and three quarters (78%) of Rocky Mountain Power Ad Aware customers mentioned their electric utilities first.
- Among those Ad Non-Aware, two thirds of Pacific Power customers (71%) and Rocky Mountain Power customers (68%) mention their utility first.

2015 Company Awareness*	Ad A	ware	Ad Non-Aware			
First Mention	Pacific Power (n=293)	Rocky Mt. Power (n=396)	Pacific Power (n=197)	Rocky Mt. Power (n=183)		
Pacific Power/PPL	83%	2%	71%	1%		
Rocky Mountain Power/Utah Power		78%	2%	68%		
Pacific Gas & Electric/PG&E	6%	1%	10%	3%		
NW Natural	2%		5%			
Portland General/PGE	1%		2%			
Avista	1%		3%			
PacifiCorp	1%	1%	1%			
Mountain Fuel/Questar	<1%	14%	1%	19%		
Other	2%	2%	2%	2%		
None				1%		

<sup>\*</sup>Utilities are listed in decreasing order according to Pacific Power top of mind, except for RMP

<sup>=</sup> significantly higher than Ad Non-Aware customers
= significantly higher than Ad Aware customers

Q1 When you think of electric or gas utilities, what **one** company comes to mind first?



## Total Unaided Company Awareness 2015

Ad Aware customers show significantly higher awareness of Pacific Power and Rocky Mountain Power than their Ad Non-Aware counterparts.

2015 Company Awareness*	Ad A	ware	Ad Non-Aware			
(Top of mind + others = total awareness)	Pacific Power (n=293)	Rocky Mt. Power (n=396)	Pacific Power (n=197)	Rocky Mt. Power (n=183)		
Pacific Power/PPL	91%	4%	85%	3%		
Rocky Mountain Power/Utah Power	1%	91%	3%	83%		
Pacific Gas & Electric/PG&E	10%	2%	13%	3%		
NW Natural	8%	<1%	18%			
Cascade	11%		7%			
Avista	8%		10%			
Portland General/PGE	5%	1%	4%			
Mountain Fuel/Questar	<1%	58%	1%	51%		
Other	5%	5%	4%	4%		

<sup>\*</sup>Utilities are listed in decreasing order according to Pacific Power top of mind, except for RMP



= significantly higher than Ad Non-Aware customers



= significantly higher than Ad Aware customers

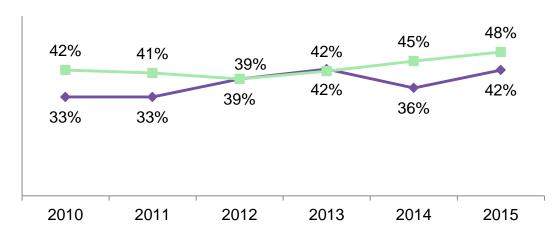


## Unaided Advertisement Awareness 2010-2015

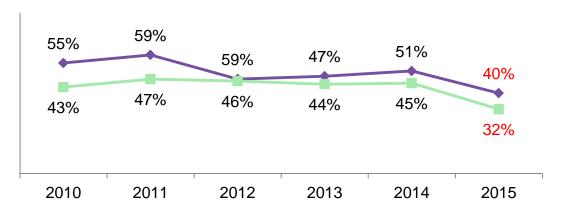
- Unaided advertising or communications awareness among both Rocky Mountain Power and Pacific Power is statistically consistent with last year.
- In 2015, there is a significant decrease among those who were not aware of any utility communications for both companies.

Pacific Power Rocky Mountain Power

#### % Unaided Utility Communication Awareness



#### % Unaided Not Aware of Any Utility **Communications**



During the past six months, from what electric or gas companies do you recall seeing,

Q3



# Unaided Advertisement Awareness 2015

- Almost half of Pacific Power (42%) and of Rocky Mountain Power (48%) customers recall an advertisement or communication from their electric company during the past six months (unaided).
- Almost one-third (29%) of Rocky Mountain Power customers have unaided recall of Mountain Fuel/Questar advertisements.

2015 Unaided Ad Awareness	Pacific Power (n=490)	Rocky Mt. Power (n=579)
Pacific Power/PPL	42%	1%
NW Natural	4%	<1%
Pacific Gas & Electric/PG&E	4%	
Avista	2%	
Portland General/PGE	2%	
PacifiCorp	<1%	1%
Rocky Mountain Power/Utah Power	<1%	48%
Mountain Fuel/Questar		29%
Other	3%	2%
None	49%	41%

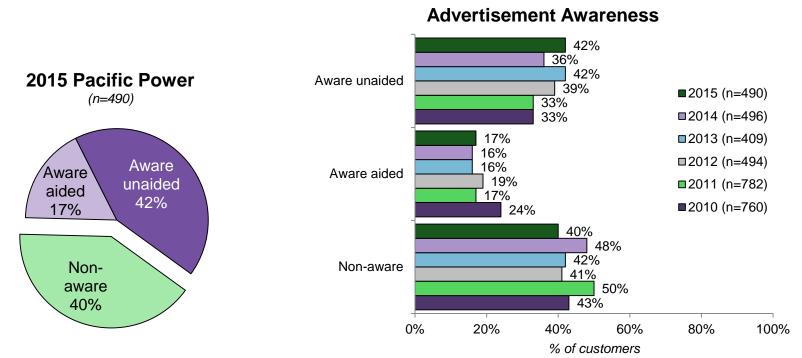
<sup>\*</sup>Utilities are listed in decreasing order according to Pacific Power unaided ad awareness.

Q3 During the past six months, from what electric or gas companies do you recall seeing, hearing or reading any form of advertisements or communications?



# Total Advertisement Awareness Pacific Power

- Total advertising recall combines unaided recall (previous pages) and aided recall of advertisements or communications during the past 6 months.
- In total, over half (59%) of Pacific Power customers are aware of the company's advertisements or communications, a slight (but not statistically significant) increase from 2014 (52%) and 2013 (58%) awareness.

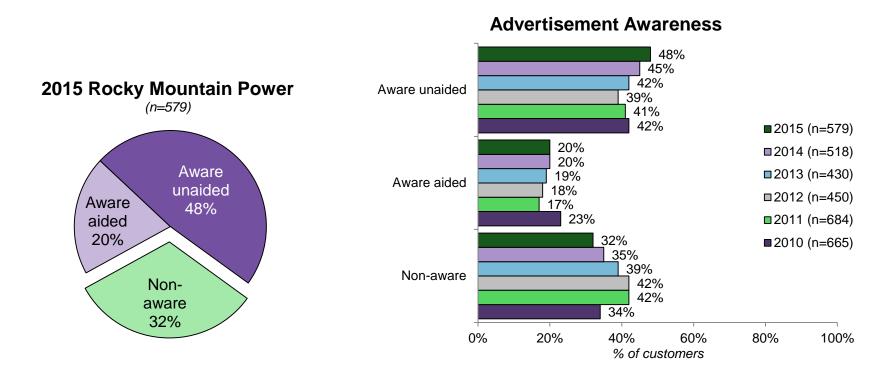


- Q3 During the past six months, from what electric or gas companies do you recall seeing, hearing or reading any form of advertisements or communications?
- Q4 During the past six months, do you recall seeing, hearing or reading any form of advertisements or communications from UTILITY?



# Total Advertisement Awareness Rocky Mountain Power

 In total, two thirds (68%) of Rocky Mountain Power customers are aware of the company's advertisements or communications, slightly higher than 2014 awareness.

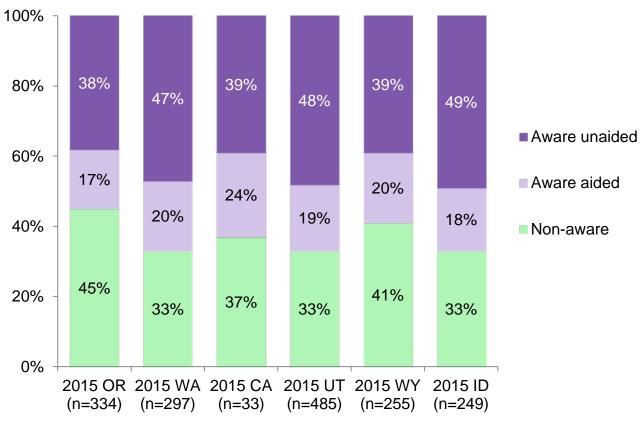


- Q3 During the past six months, from what electric or gas companies do you recall seeing, hearing or reading any form of advertisements or communications?
- Q4 During the past six months, do you recall seeing, hearing or reading any form of advertisements or communications from UTILITY?

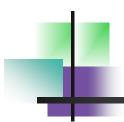


# Total Advertisement Awareness By State

 Two thirds of customers are aware of Pacific Power or Rocky Mountain Power advertisements or communications in WA, CA, UT and ID. Awareness is slightly lower in OR and WY.



- Q3 During the past six months, from what electric or gas companies do you recall seeing, hearing or reading any form of advertisements or communications?
- Q4 During the past six months, do you recall seeing, hearing or reading any form of advertisements or communications from UTILITY?



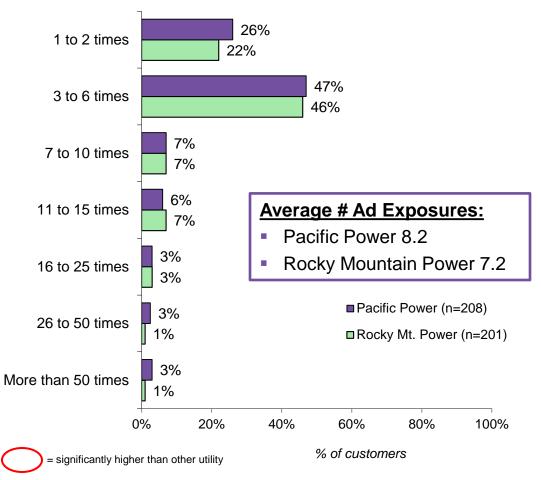
# **Advertising & Communication Recall**

- The following section presents the study's findings on customers' perceptions
  of the advertising campaign, including message recall, communication
  channels, message importance and "Let's Turn the Answers On."
- Only those customers who recalled advertisements or communications from Pacific Power or Rocky Mountain Power were asked the following series of questions presented in this section.



## Advertising Exposure Recall

#### 2015 Number of Recalled Advertising Exposures



- The average number of advertising exposures recalled among Rocky Mountain Power customers showed a decrease from 2014 (12.3 to 7.2 respectively).
- The average number of advertising exposures among Pacific Power customers showed a slight increase from 2014 (7.1 to 8.2 respectively)

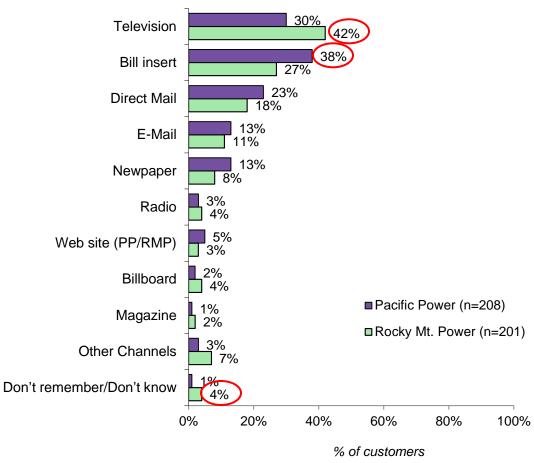
Q5a During the past six months, about how many advertisements have you seen from UTILITY on television, radio or newspapers?



# Advertising & Communication Channels 2015

#### 2015 Advertising & Communication Channels\*

- Television is the most frequently mentioned channel for advertisements and communications.
- Rocky Mountain Power customers are significantly more likely than Pacific Power customers to remember ads through television.
- Bill inserts are mentioned significantly more frequently by Pacific Power customers than Rocky Mountain Power customers.



\*Advertising & communication channels are listed in decreasing order by total.

Where did you see, hear or read these advertisements or communications from UTILITY?

Q5b

<sup>=</sup> significantly higher than other utility



# Unaided & Aided Message Recall 2015

- Overall, "using energy wisely" and "energy efficiency programs" are the most widely recalled messages.
- Pacific Power customers are significantly more likely to recall messages with content about "renewable or alternative energy" (unaided + aided), "billing and energy assistance" (unaided + aided), and "Blue Sky program" (unaided + aided).
- Rocky Mountain Power customers are significantly more likely to recall messages with content about "being Wattsmart" (unaided + aided), and "electrical safety" (unaided).

Messages Recalled	P	Pacific Powe (n=208)	er	Rocky Mt. Power (n=201)			
	Unaided	Aided	Total	tal     Unaided     Aided       %     18%     41%       %     13%     42%       %     4%     35%       %     4%     26%       %     4%     36%       %     7%     57%       %     9%     27%       %     3%     28%       %     3%     24%       %     0%     25%       %     1%     20%	Total		
Using energy wisely	17%	44%	61%	18%	41%	59%	
Energy efficiency programs	15%	42%	57%	13%	42%	55%	
Renewable or alternative energy	8%	43%	51%	4%	35%	39%	
Billing or energy assistance	5%	42%	47%	4%	26%	30%	
Blue Sky Program	7%	46%	53%	4%	36%	40%	
Being "Wattsmart	5%	43%	48%	7%	57%	64%	
Electrical safety	4%	37%	41%	9%	27%	36%	
Preparing for power outages	1%	38%	39%	3%	28%	31%	
Working to keep your power on	1%	30%	31%	3%	24%	27%	
Programs such as equal pay or customer guarantees	1%	32%	33%	0%	25%	25%	
Planning for your future energy needs	1%	28%	29%	1%	20%	21%	
Environment friendly (green energy)	1%			0%			
Don't remember/Don't know	39%	16%	55%	34%	17%	51%	

What types of messages or topics do you remember from UTILITY's advertisements or communications?

Do you remember any of the following messages or topics from the UTILITY advertisements or communications?

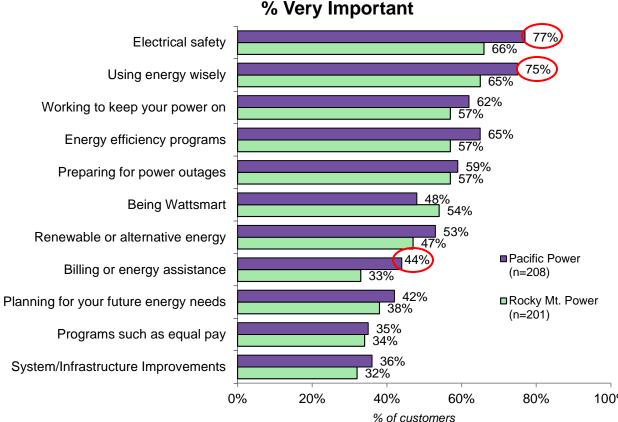


Q6

Q7

# Importance of Communication Messages 2015

- "Electrical safety" and "using energy wisely" remain the messages most important to customers.
- Pacific Power customers are significantly more likely than Rocky Mountain Power customers to rate "working to keep your power on" and "billing or energy assistance" as very important.



% very or Som	ewhat Important
Pacific Power (n=208)	Rocky Mt. Power (n=201)
94%	93%
97%	95%
89%	82%
95%	93%
91%	92%
92%	91%
87%	83%
84%	75%
80%	83%
75%	78%
81%	74%

Do you think the following messages are very important, somewhat important, not very important or not at all important for UTILITY to communicate to customers like yourself?

Q8



- The following slide presents a quadrant chart outlining the <u>relative importance</u> of each advertising message and the <u>relative awareness</u> of each message.
- Messages considered highly important, but with low awareness, indicate opportunity areas for Pacific Power and Rocky Mountain Power. Increasing awareness of these important messages may help promote more positive impressions of the utility, as well as boost overall satisfaction.

#### **High Importance**

#### **Opportunity Area**

Lower than average awareness and higher than average importance ratings

#### **High Priority**

Higher than average awareness and higher than average importance ratings

#### **Low Awareness**

#### **High Awareness**

#### **Low Priority**

Lower than average awareness and lower than average importance ratings

#### Nice to Have

Higher than average awareness and lower than average importance ratings

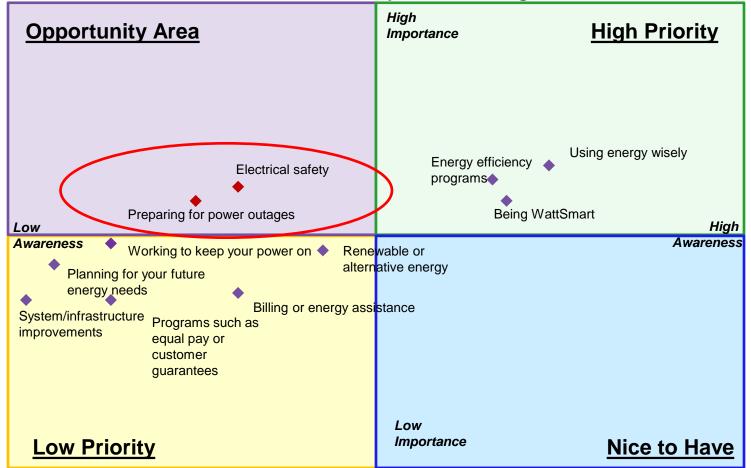
**Low Importance** 



# Message Awareness vs. Importance Ratings 2015

- The messages "preparing for power outages," and "electrical safety" have higher than average importance, but lower than average awareness, indicating an opportunity area to raise awareness.
  - In 2015, the message "working to keep your power on" moved back out of the opportunity quadrant.

2015 Awareness vs. Importance Ratings





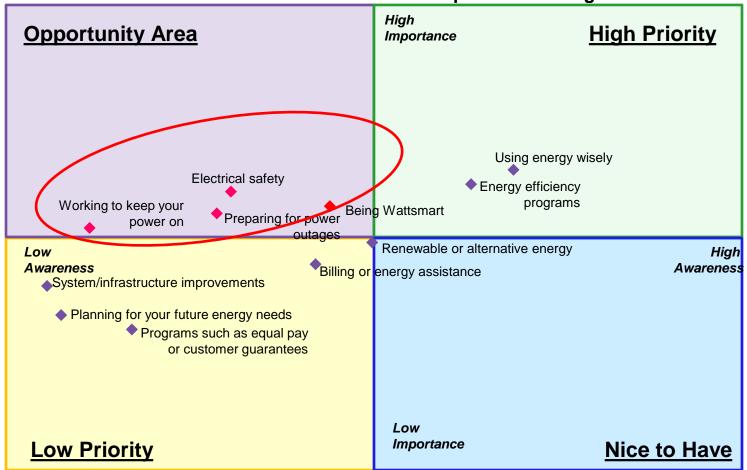
# Message Awareness vs. Importance Ratings 2010-2015

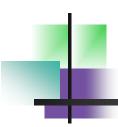
	2010	2011	2012	2013	2014	2015
Electrical safety	High Priority	Opportunity Area	Opportunity Area	Opportunity Area	Opportunity Area	Opportunity Area
Preparing for power outages	Opportunity Area	Opportunity Area	Opportunity Area	Opportunity Area	Opportunity Area	Opportunity Area
Working to keep your power on	Opportunity Area	Nice to Have	Opportunity Area	Opportunity Area	Opportunity Area	Low Priority
Using energy wisely	High Priority					
Energy efficiency programs	High Priority					
Being Wattsmart	n/a	High Priority				
Renewable or alternative energy	High Priority	Nice to Have	High Priority	High Priority	High Priority	Low Priority
Billing or energy assistance	Low Priority	Low Priority	Nice to Have	Low Priority	Nice to Have	Low Priority
Planning for your future energy needs	Opportunity Area	Opportunity Area	Low Priority	Opportunity Area	Low Priority	Low Priority
Programs such as equal pay or customer guarantees	Low Priority					
System/infrastructure improvements	Low Priority					



# Message Awareness vs. Importance Ratings 2015 – PP

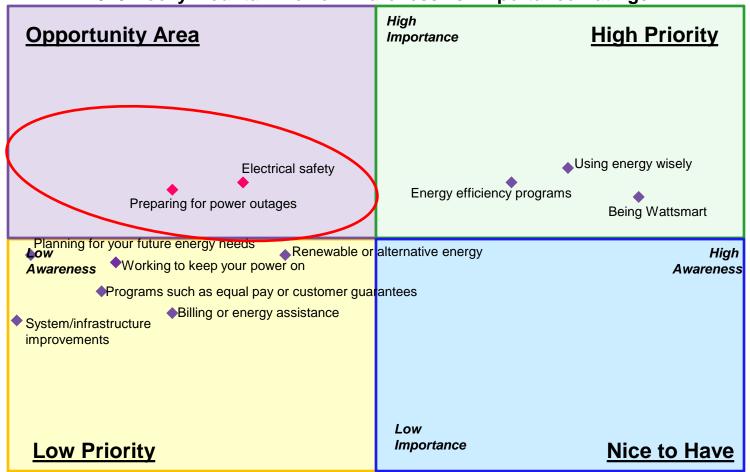
2015 Pacific Power Awareness vs. Importance Ratings





# Message Awareness vs. Importance Ratings 2015 – RMP

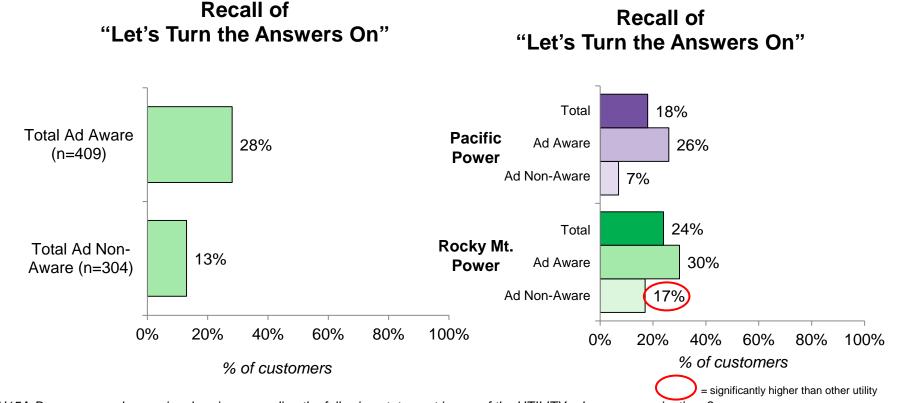
2015 Rocky Mountain Power Awareness vs. Importance Ratings

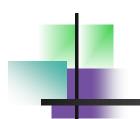




# "Let's Turn the Answers On" 2015

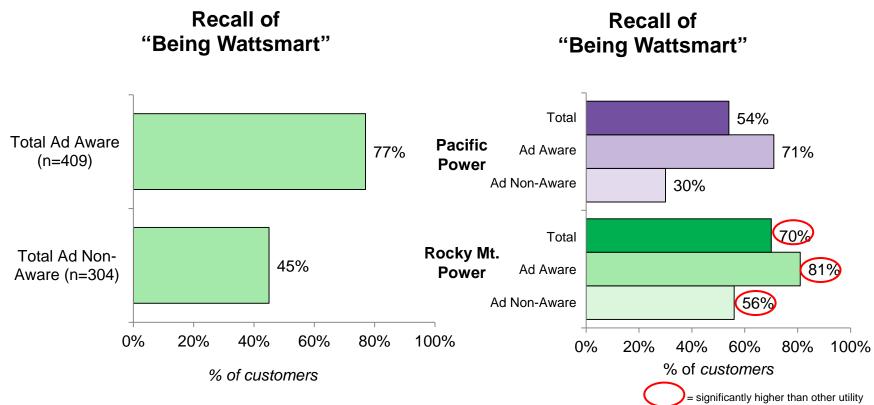
- Just over one quarter (28%) of all Ad Aware customers recall the phrase "Let's Turn the Answers On."
  - Rocky Mountain Power Ad Non-Aware customers are significantly more likely to recall the phrase than Pacific Power Ad Non-Aware customers.





# "Being Wattsmart" 2015

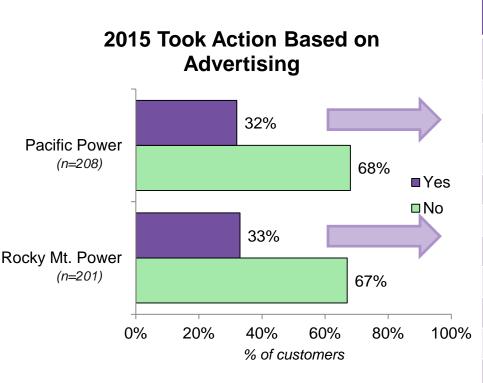
- Three in four (77%) Ad Aware customers recall the phrase "Being Wattsmart."
- Rocky Mountain Power customers are significantly more likely to recall "Being Wattsmart" than Pacific Power customers.



QN15B Do you remember seeing, hearing or reading the following statement in any of the UTILITY ads or communications?

# Actions Taken Based on Advertisements 2015

- Overall, one third (33%) of Ad Aware customers report taking some action based on the advertisements or communications.
- Among customers persuaded to take action, "purchased/switched to energy efficient appliances/lights," and "shutting
  off lights/appliances when not in use" were the top two actions taken.

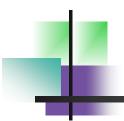


Actions taken from seeing the ads or communications	Pacific Power (n=66)	Rocky Mt. Power (n=67)
Shutting off lights/appliances when not in use	20%	18%
Purchased/switched to energy efficient appliances/lights	18%	45%
Invested in the Blue Sky program*	14%	4%
Enlisting in utility incentive/rebate programs	13%	8%
More aware of power usage	11%	11%
Invested in equal bill pay	9%	4%
Be prepared for power outages	8%	4%
Changing daily use of appliances	5%	4%
Become more energy efficient	5%	6%
Wattsmart	5%	7%
Invested in the wind power program	2%	1%

Q12 Did any of the UTILITY ads or communications persuade you to take any action?
Q13 What action did you take from seeing the UTILITY ads or communications? \*added 2015
2015 Customer Awareness Campaign Research

= significar

= significantly higher than other utility



# Impact of Advertisements and Communications on Customer Satisfaction & Company Image



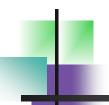
# Advertisements' Impact on Company Satisfaction – Ad Aware

- Three quarters (75%) of Pacific Power customers and over three quarters (78%) of Rocky Mountain Power Ad Aware customers are "very satisfied" with their utility company.
- The percentage of Pacific Power Ad Aware customers "very satisfied" with the company increased significantly from 2014.

Ad Aware:	20	10	20	11	20	12	20	13	20	14	20	15
Advertisements' Impact on Company	Pacific Power	Rocky Mt. Power										
Satisfaction	(n=200)	(n=218)	(n=300)	(n=300)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=208)	(n=201)
Very satisfied (8-10 ratings)	75%	72%	66%	76%	68%	78%	70%	74%	66%	75%	75%	78%
Moderately satisfied (5-7 ratings)	19%	22%	28%	21%	26%	20%	23%	22%	27%	20%	22%	18%
Not satisfied (0-4 ratings)	4%	6%	5%	3%	5%	2%	7%	4%	7%	5%	3%	3%

BLUE = significantly higher than 2014 RED = significantly lower than 2014

Q16 Now I'm going to ask some questions about your satisfaction with UTILITY. First, using a 0-10 scale, where 0 means not at all satisfied, and 10 is completely satisfied, how satisfied are you overall with UTILITY?



# Advertisements' Impact on Company Satisfaction – Ad Non-Aware

 Three quarters of Rocky Mountain Power (75%) and Pacific Power (70%) Ad Non-Aware customers are "very satisfied" with their utility company.

Ad Non-Aware:	20	10	2011		2012		2013		2014		20	2015	
Advertisements' Impact on Company	Pacific Power	Rocky Mt. Power											
Satisfaction	(n=150)	(n=150)	(n=200)	(n=200)	(n=150)	(n=150)	(n=150)	(n=150)	(n=150)	(n=150)	(n=153)	(n=151)	
Very satisfied (8-10 ratings)	63%	64%	68%	76%	56%	69%	69%	60%	63%	65%	70%	75%	
Moderately satisfied (5-7 ratings)	27%	28%	21%	15%	27%	27%	26%	32%	29%	31%	22%	21%	
Not satisfied (0-4 ratings)	11%	6%	9%	8%	13%	4%	3%	5%	5%	4%	7%	3%	

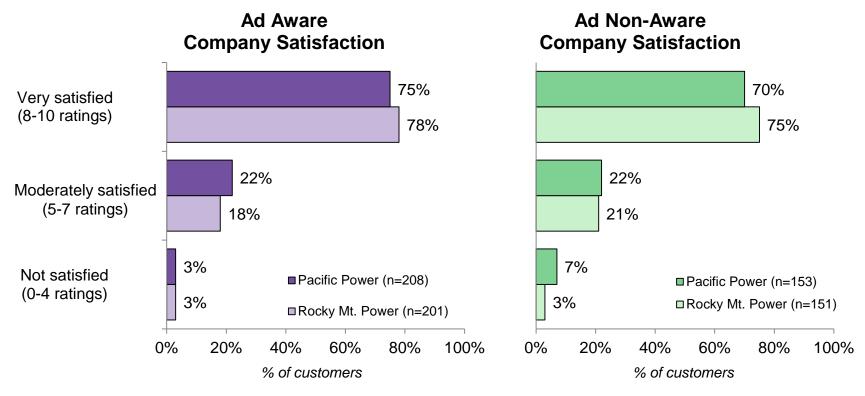
BLUE = significantly higher than 2014 RED = significantly lower than 2014

Q16 Now I'm going to ask some questions about your satisfaction with UTILITY. First, using a 0-10 scale, where 0 means not at all satisfied, and 10 is completely satisfied, how satisfied are you overall with UTILITY?



# Advertisements' Impact on Company Satisfaction – 2015

- Three quarters of customers overall are "very satisfied" with their utility company.
- Satisfaction among Ad Aware and Ad Non-Aware customers is statistically equivalent.



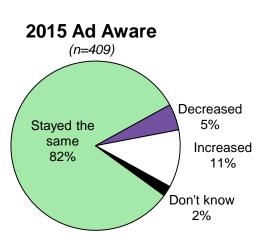
Q16 Now I'm going to ask some questions about your satisfaction with UTILITY.

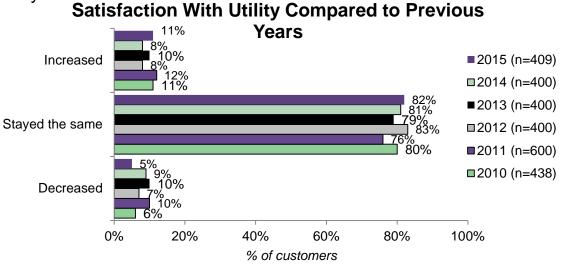
First, using a 0-10 scale, where 0 means not at all satisfied, and 10 is completely satisfied, how satisfied are you overall with UTILITY?

= significantly higher than Ad Non-Aware customers
= significantly higher than Ad Aware customers

## Satisfaction Comparison With Previous Years Ad Aware

 Eight in ten (82%) Ad Aware customers state that their satisfaction with their utility company has remained unchanged since the previous year.



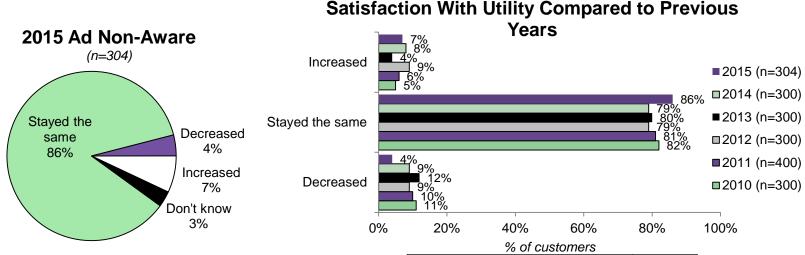


Why has your satisfaction increased?	2015
	(n=45)
Good reliable service	20%
Keeping people informed	15%
Works with the customer	15%
Quality of customer service	13%
Quick at restoring power	11%
Lower rates/affordable price	7%
Other	13%

Why has your satisfaction decreased?	2015
400.040041	(n=22)*
Increased cost/rates	60%
Quality of customer service	5%
Difficult to work with	5%
Many service interruptions	4%
Other	36%

## Satisfaction Comparison With Previous Years Ad Non-Aware

 Over eight in ten Ad Non-Aware customers state their satisfaction with their utility company remains unchanged from one year ago.



Why has your satisfaction increased?	2015
	(n=22)*
Good reliable service	27%
Quality of customer service	13%
Quick at restoring power	11%
Billing services assistance	5%
Lower rates/affordable price	4%
Other	13%

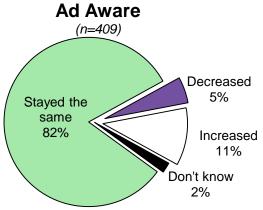
Why has your satisfaction decreased?	2015
	(n=13)*
Increased cost/rates	64%
Many service interruptions	19%
Poor service (general)	9%
Difficult to work with	9%
Quality of customer service	6%
Lack of communication w/customers	6%
Other	0%



# Satisfaction Comparison Between Ad Aware and Ad Non-Aware 2015

- Company satisfaction has remained unchanged for most customers.
  - No significant differences exist between Ad Aware and Non-Aware customers.

11%



	Don't k	
Why has your satisfaction increased?	Ad Aware (n=45)	Ad Non-Aware (n=22)*
Good reliable service	20%	27%
Quality of customer service	13%	13%
Works with the customer	15%	8%
Lower rates/affordable price	7%	4%
Keeping people informed	15%)	

Ad Non-Aware	
	Decreased
Stayed the	Decreased 4%
same 86%	Increased 7%
	Don't know
	3%

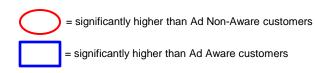
Why has your satisfaction decreased?	Ad Aware (n=22)*	Ad Non-Aware (n=13)*
Increased cost/rates	60%	64%
Quality of customer service	5%	6%
Poor service (general)		9%
Lack of communication w/customers		6%
Difficult to work with	5%	9%
Many service interruptions	4%	19%

\*CAUTION: small sample sizes.

Quick at restoring power

Q17/Q18 Compared to a year ago, has your satisfaction with UTILITY increased, stayed the same or decreased? Why?

11%





#### Company Image Evaluation

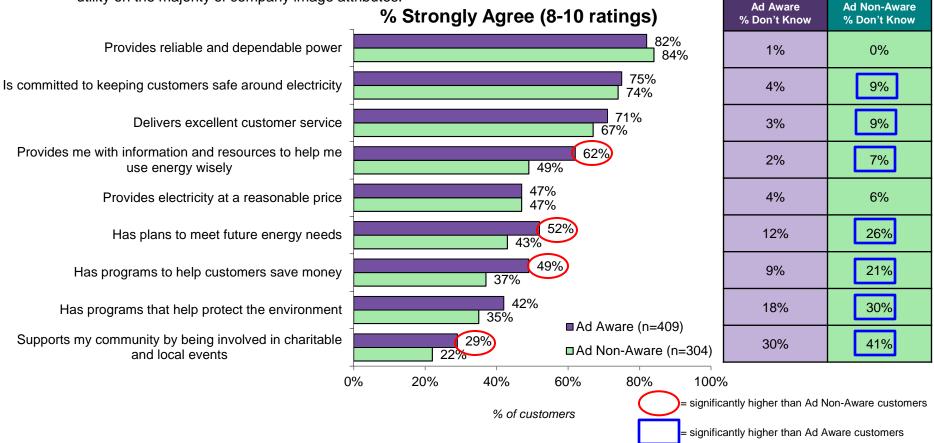
- Overall, customers' perceptions of their utility company have remained largely consistent.
  - In 2015, Ad Non-Aware customers are significantly more likely to "strongly agree" their utility provides reliable and dependable power (84% vs. 77% in 2014), is committed to keeping customers safe around electricity (74% vs. 66% in 2014), delivers excellent customer service (67% vs. 56% in 2014) and has plans to meet future energy needs (43% vs. 35% in 2014).
- Customers continue to have the most positive perceptions of their utility when it comes to attributes they are most likely to have <u>personally experienced</u>, including:
  - Provides reliable and dependable power
  - Is committed to keeping customers safe around electricity
  - Delivers excellent customer service
- Similarly, customers are least likely to agree with, and most likely to give "don't know" responses to the statements to which they are <u>unlikely to have direct experience</u>. These statements include:
  - Supports my community by being involved in charitable and local events
  - Has programs that help protect the environment
  - Has programs to help customers save money
  - Has plans to meet future energy needs
- The following slides present the percentage of customers who "strongly agree" with a series of statements about their electric utility by giving 8-10 ratings on a 0-10 scale.



Ad Aware customers are significantly more likely than Ad Non-Aware customers to "strongly agree" their utility provides information and resources to help use energy wisely, has plans to meet future energy needs, has programs that help customers save money, and supports the community.

Ad Non-Aware customers are significantly more likely than Ad Aware customers to say they "don't know" how to evaluate their

utility on the majority of company image attributes.



Based on your overall perceptions and experiences with UTILITY, please rate each of the following statements on a scale of 0-10, where 0 means you completely disagree with the statement, and 10 means you completely agree.



### Company Image Evaluation 2009-2015

In 2015, Ad Non-Aware customers are significantly more likely, compared to 2014, to "strongly agree" that their utility provides reliable and dependable power, is committed to keeping customers safe around electricity, delivers excellent customer service and has plans to meet future energy needs.

	2010		20	2011		2012		2013		2014		15
Company Image Attributes (% "strongly agree" 8-10 ratings)	Ad Aware	Ad Non- Aware										
	(n=438)	(n=300)	(n=600)	(n=400)	(n=400)	(n=300)	(n=400)	(n=300)	(n=400)	(n=300)	(n=409)	(n=304)
Provides reliable and dependable power	81%	72%	77%	80%	79%	77%	82%	81%	81%	77%	82%	84%
Is committed to keeping customers safe around electricity	74%	66%	76%	69%	70%	65%	71%	68%	72%	66%	75%	74%
Delivers excellent customer service	65%	58%	66%	66%	64%	61%	65%	66%	70%	56%	71%	67%
Provides me with information and resources to help me use energy wisely	57%	52%	56%	54%	54%	46%	54%	49%	56%	44%	62%	49%
Has plans to meet future energy needs	51%	42%	47%	38%	43%	37%	47%	36%	48%	35%	52%	43%
Provides electricity at a reasonable cost	48%	40%	41%	41%	40%	41%	49%	42%	49%	42%	47%	47%
Has programs to help customers save money	47%	35%	49%	44%	45%	40%	44%	37%	48%	43%	49%	37%
Has programs that help protect the environment	41%	34%	42%	34%	41%	34%	41%	30%	43%	35%	42%	35%
Supports my community by being involved in charitable and local events	27%	19%	25%	21%	21%	22%	26%	22%	30%	21%	29%	22%

BLUE = significantly higher than 2014 RED = significantly lower than 2014

Q19 Based on your overall perceptions and experiences with UTILITY, please rate each of the following statements on a scale of 0-10, where 0 means you completely disagree with the statement, and 10 means you completely agree.

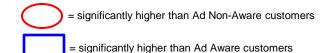


(by Utility & Ad Awareness)

Pacific Power Ad Aware customers are significantly more likely than Ad Non-Aware customers to "strongly agree" with many of the company attributes tested.

Company Image Attributes	Ad A	ware	Ad Non-Aware			
(% "strongly agree" 8-10 ratings)	Pacific Power (n=208)	Rocky Mt. Power (n=201)	Pacific Power (n=153)	Rocky Mt. Power (n=151)		
Provides reliable and dependable power	83%	82%	84%	84%		
Is committed to keeping customers safe around electricity	76%	75%	72%	75%		
Delivers excellent customer service	77%	66%	63%	70%		
Provides me with information and resources to help me use energy wisely	68%	58%	50%	48%		
Has plans to meet future energy needs	55%	49%	45%	42%		
Provides electricity at a reasonable price	50%	45%	41%	51%		
Has programs to help customers save money	56%	44%	37%	38%		
Has programs that help protect the environment	52%	35%	34%	36%		
Supports my community by being involved in charitable and local events	31%	27%	22%	22%		

Q19 Based on your overall perceptions and experiences with UTILITY, please rate each of the following statements on a scale of 0-10, where 0 means you completely disagree with the statement, and 10 means you completely agree.

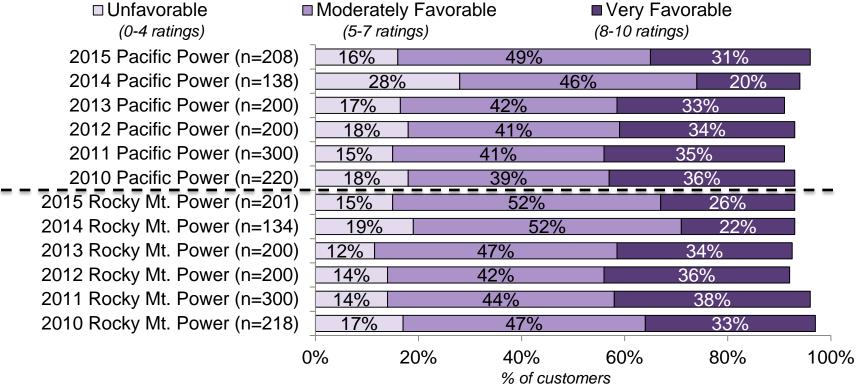




## Advertisements' Impact on Company Image 2010-2015

One third (28%) of Ad Aware customers say that the ads have "very favorably" affected their opinion
of their electric utility, while the percentage who rate the impact as "unfavorable" (16%) decreased
significantly from 2014.

#### Advertisements' Impact on Favorability Ratings



Using a 0-10 scale, where 0 means much less favorable, and 10 is much more favorable, how have the advertisements or communications you have seen, heard or read from UTILITY affected your opinion of the company? You can use any number from 0-10.



### Rationales for Company Favorability Ratings 2015

	Very Favorable (8-10 rating) (n=115)	Moderately Favorable (5-7 rating) (n=207)	Least Favorable (0-4 rating) (n=64)
34%	Good company/positive opinion	15% Rarely see advertisements/do not affect me/not useful/not necessary	21% Rarely see advertisements/do not affect me/not useful/not necessary
13%	Informative (general)	12% Neutral feeling towards them	17% Limited choice in utility provider/monopoly
11%	Advertisements serve as education to consumers	10% Limited choice in utility provider/monopoly	10% Not convinced of the information given
5%	Efforts towards renewable/alternative energy	9% Good company/positive opinion	9% Haven't paid attention
4%	Negative opinion/bad company	7% Haven't paid attention	5% Increased cost/rates
4%	Information is useful to energy habits/usage	4% Negative opinion/bad company	5% No communication besides my bill
4%	Offer incentives/financial programs	3% Not convinced of the information given	4% Negative opinion/bad company
4%	Rarely see advertisements/do not affect me/not useful/not necessary	3% Increased cost/rates	3% Neutral feeling towards them
3%	Commercials are good	3% My opinion hasn't changed	3% Efforts towards renewable/alternative energy



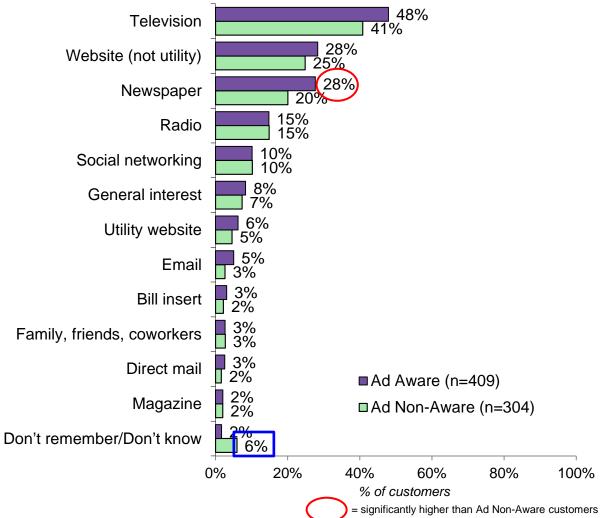
#### **Communication Sources**



# News & Current Event Sources 2015

- Television, non-utility websites, and newspapers are the primary sources for news and current events.
- Ad Aware customers are significantly more likely to read a newspaper for information about news and current events.
- Customers age 54 and younger are more likely to rely on nonutility websites (36% vs. 18% for 55+), whereas customers 55 and older are more likely to rely on television and newspapers for news and current events.

#### **News & Current Event Channels**



= significantly higher than Ad Aware customers



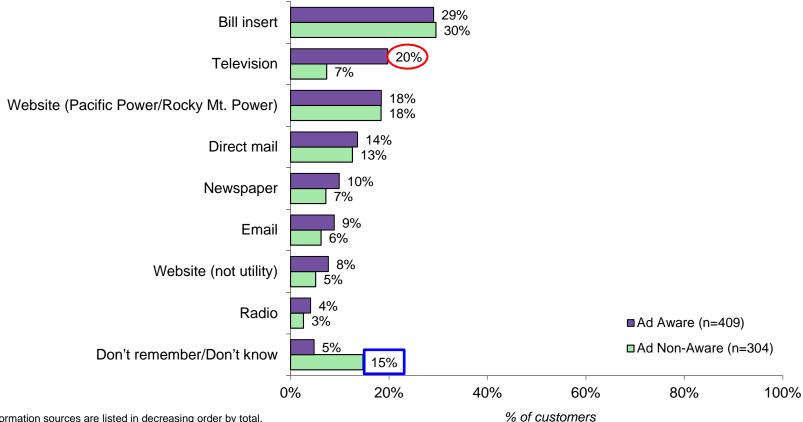
- Television is still the primary source for news despite a significant decrease in usage from 2014 to 2015.
  - Both Ad Aware and Ad Non-Aware customers also report significantly less usage of newspaper than in 2014.
  - Ad aware customers are more likely to report using social networking than in 2014.

	2010		2011		2012		2013		2014		2015	
News & Current Event Sources	Ad Aware (n=438)	Ad Non- Aware (n=300)	Ad Aware (n=600)	Ad Non- Aware (n=400)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=409)	Ad Non- Aware (n=304)
Television	64%	62%	67%	57%	58%	61%	56%	52%	58%	49%	48%	41%
Website (not utility)	30%	27%	32%	33%	31%	26%	34%	37%	30%	26%	28%	25%
Newspaper	48%	38%	43%	30%	41%	36%	38%	27%	37%	28%	28%	20%
Radio	21%	15%	18%	13%	21%	17%	26%	20%	18%	13%	15%	15%
Social networking	4%	2%	4%	3%	4%	6%	5%	1%	5%	6%	10%	10%
General internet	3%	4%	7%	6%	7%	5%	8%	6%	9%	6%	8%	7%
Utility website	3%	2%	2%	2%	3%	2%	3%	0%	6%	4%	6%	5%
Bill insert	2%	1%	2%	3%	3%	4%	1%	1%	1%	2%	3%	2%
Family, friends, coworkers	3%	4%	1%	1%	3%	1%	2%	2%	4%	4%	3%	3%
Direct mail	3%	3%	<1%	1%	2%	2%	2%	2%	4%	2%	3%	2%
Magazine	2%	2%	3%	1%	3%	3%	4%	1%	2%	1%	2%	2%
Don't remember/Don't know	1%	6%	1%	5%	2%	2%	0%	1%	1%	5%	2%	6%

#### **Utility Information Sources** 2015

- Bill inserts remain the primary source for utility information.
- Ad Aware customers are more likely to utilize television for information about their utility.





\*Information sources are listed in decreasing order by total.

= significantly higher than Ad Non-Aware customers = significantly higher than Ad Aware customers

41

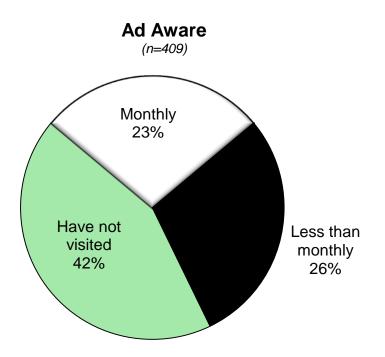


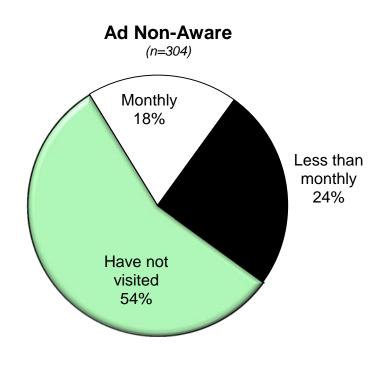
- Top sources of utility information remain relatively consistent with the previous year, with bill inserts, utility websites, television, and direct mail being the primary sources.
  - Both Ad Aware and Ad Non-Aware customers are more likely to mention email as a source for information on their utility in 2015.

	20	2010		2011		2012		2013		2014		2015	
Utility Information Sources	Ad Aware (n=438)	Ad Non- Aware (n=300)	Ad Aware (n=600)	Ad Non- Aware (n=400)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=400)	Ad Non- Aware (n=300)	Ad Aware (n=409)	Ad Non- Aware (n=304)	
Bill insert	38%	40%	41%	34%	38%	35%	31%	31%	29%	29%	29%	30%	
Website (Pacific Power/Rocky Mt. Power)	12%	6%	20%	18%	18%	13%	20%	13%	17%	16%	18%	18%	
Television	27%	13%	30%	11%	19%	14%	15%	9%	18%	13%	20%	7%	
Direct mail	15%	12%	11%	12%	17%	11%	20%	18%	14%	11%	14%	13%	
Newspaper	18%	10%	14%	9%	8%	9%	12%	6%	15%	9%	10%	7%	
Email	1%		<1%	<1%	2%	1%	3%	1%	4%	1%	9%	6%	
Website (not utility)	6%	4%	6%	4%	6%	8%	7%	7%	7%	6%	8%	5%	
Radio	5%	3%	7%	2%	7%	3%	5%	2%	4%	1%	4%	3%	
Don't remember/Don't know	9%	22%	8%	20%	7%	11%	6%	18%	7%	17%	5%	15%	

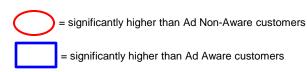


- Almost half (49%) of Ad Aware, and four in ten (42%) of Ad Non-Aware customers have visited their electric utility's website, consistent with 2014 figures.
- Of those who have visited their utility's website, half visit less than monthly.





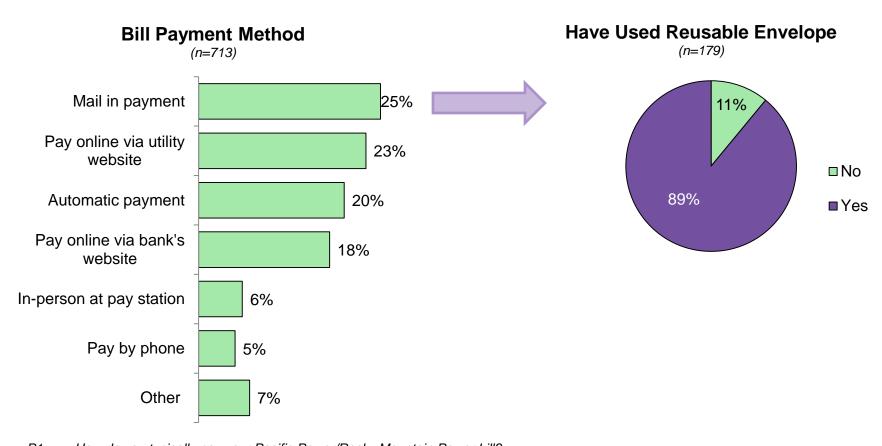
Q22/Q23 Have you ever visited the UTILITY website? How often do you visit UTILITY website?





#### Use of Reusable Payment Envelope

• Nine in ten (89%) customers who mail in their bill payment report having used the reusable envelope.

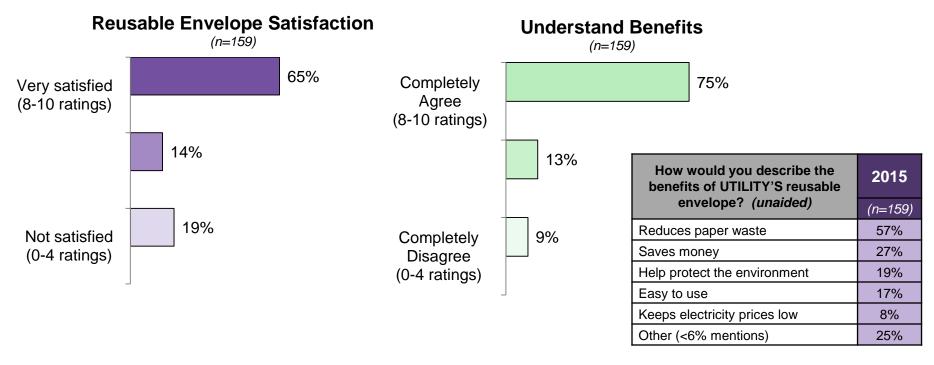


- P1. How do you typically pay your Pacific Power/Rocky Mountain Power bill?
- P2. Have you used the reusable envelope to mail in your payment?



## Reusable Envelope Benefits and Satisfaction

- Of the customers who have used the reusable envelope, two thirds (65%) are "very satisfied."
- Three quarters (75%) of respondents agree that they "clearly understand the benefits" of the envelope, which over half (57%) described as "reducing paper waste."



- P3. Using a 0-10 scale, where 0 means not at all satisfied, and 10 is completely satisfied, how satisfied are you overall with Pacific Power/Rocky Mountain Power's reusable envelope?
- P4. Please rate the following statement on a scale of 0-10, where 0 means you completely disagree with the statement, and 10 means you completely agree. "I clearly understand the benefits of the reusable envelope."
- P5. How would you describe the benefits of UTILITY'S reusable envelope?



### **Energy Efficiency Programs**

### Awareness of Energy Efficiency Programs 2013-2015

 Consistent with 2014, one third (35%) of respondents are aware of energy efficiency programs offered by Pacific Power and Rocky Mountain Power.

FF	(	Dregor	า	Wa	shing	ton	C	aliforn	ia		Utah		W	yomir	ıg		Idaho	
EE	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Awareness	(n=266)	(n=266)	(n=269)	(n=62)	(n=62)	(n=209)	(n=22)*	(n=22)*	(n=24)*	(n=277)	(n=277)	(n=279)	(n=200)	(n=200)	(n=201)	(n=26)*	(n=26)*	(n=204)
Yes	33%	35%	35%	44%	35%	39%	32%	45%	33%	40%	40%		28%	21%	27%	35%	42%	41%
No	56%	62%	62%	48%	61%	59%	64%	55%	67%	54%	56%	61%	68%	77%	69%	62%	58%	56%
Don't remember/ Don't know	11%	3%	3%	11%	3%	2%	5%	0%	0%	5%	4%	3%	4%	2%	4%	4%	0%	3%

\*CAUTION: small sample sizes.



- Customers' awareness of a select group of programs was also measured. The following combines both unaided and aided awareness of each program.
  - Only residents of Utah were asked about "Energy Star New Homes," "Cool Cash Incentive" and "Cool Keeper."

Program	Oregon		Washington		California		Utah			W	yomir	ıg		Idaho				
Recall			<b>2015</b> (n=269)		<b>2014</b> (n=62)	<b>2015</b> (n=209)				<b>2013</b> (n=277)					<b>2015</b> (n=201)			<b>2015</b> (n=204)
Cool Keeper	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	41%	32%	44%	n/a	n/a	n/a	n/a	n/a	n/a
See Ya Later, Refrigerator	41%	32%	30%	66%	58%	72%	55%	50%	29%	68%	76%	67%	46%	45%	46%	50%	65%	50%
Home Energy Savings	46%	40%	53%	54%	48%	59%	45%	73%	50%	61%	76%	60%	50%	61%	58%	50%	69%	58%
Wattsmart	45%	41%	50%	64%	58%	74%	41%	32%	50%	58%	71%	63%	41%	57%	53%	34%	58%	58%
Energy Star New Homes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	44%	31%	40%	n/a	n/a	n/a	n/a	n/a	n/a
Rebates and cashback*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	38%	39%	58%	n/a	n/a	n/a	n/a	n/a	n/a
Low Income Weatherization	45%	34%	49%	39%	31%	45%	50%	46%	42%	26%	35%	27%	25%	34%	30%	35%	46%	35%
Home Energy Reports	n/a	22%	32%	n/a	36%	60%	n/a	n/a	n/a	n/a	31%	49%	n/a	n/a	34%	n/a	n/a	43%

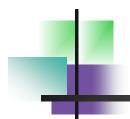
EE2 What energy efficiency or conservation programs are you aware of from UTILITY?

EE3 Now I'm going to read you a description of energy efficiency program offered by UTILITY. For each, please let me know if you were aware of it before this call.

\*Formerly called "Cool Cash Incentive.

Note: Cool Cash Incentive, Cool Keeper, Energy Star New Homes, and Home Energy Reports show data for total answering; sample size may vary.

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### Energy Trust of Oregon Awareness 2012-2015

- Consistent with 2014, half of all respondents from Oregon have heard of the Energy Trust of Oregon.
  - Of these respondents, over half (52%) are aware that Pacific Power and the Energy Trust of Oregon work together as partners on energy efficiency programs for Oregon utility customers.

Have you ever heard of the Energy Trust of Oregon?

Are you aware that Pacific Power and the Energy Trust of Oregon work together as partners on energy efficiency programs for Oregon utility customers?

	Oregon						
	<b>2012</b> (n=266)			<b>2015</b> (n=225)			
Yes	54%	62%	53%	55%			
No	43%	37%	43%	43%			
Don't remember/Don't know	3%	2%	4%	1%			

	Oregon						
	<b>2012</b> (n=143)	<b>2013</b> (n=164)	<b>2014</b> (n=83)	<b>2015</b> (n=124)			
Yes	48%	43%	61%	52%			
No	50%	51%	37%	44%			
Don't remember/Don't know	3%	6%	2%	4%			

OR1 Have you ever heard of the Energy Trust of Oregon?

OR3 Are you aware that Pacific Power and the Energy Trust of Oregon work together as partners on energy efficiency programs for Oregon Utility customers?



### **Key Findings**

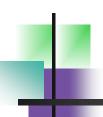


- Överall company awareness of Pacific Power and Rocky Mountain Power remains high, and is consistent with 2014 figures.
- Reported advertising/communication awareness is statistically consistent with last year for both Pacific Power and Rocky Mountain Power.
  - Pacific Power % Aware: 57% 2010, 50% 2011, 58% 2012, 58% 2013, 52% 2014 and 59% 2015
  - Rocky Mountain Power % Aware: 66% 2010, 58% 2011, 57% 2012, 61% 2013, 65% 2014 and 68% 2015.
- For the first time, the number of ad exposures recalled is consistent among Rocky Mountain Power Ad Aware customers (8.2) and Pacific Power Ad Aware customers (7.2).
- The advertisements/communications from Pacific Power/Rocky Mountain Power have moderately favorable influence.
  - Over one quarter (28%) of Ad Aware customers say that the ads have "very favorably" affected their opinion of their electric utility.
  - The rate of impact as "unfavorable" decreased significantly from 2014 (23% vs. 16%).
  - Overall satisfaction is slightly higher among Ad Aware customers (Ad Aware: 75% PP/78% RMP; Ad Non-Aware: 70% PP/75% RMP).
- The most frequently recalled messages remain <u>using energy wisely</u>, and <u>energy efficiency programs</u>.
  - Pacific Power customers are significantly more likely to recall messages with content about "renewable or alternative energy," "billing and energy assistance," and "Blue Sky Renewable Energy."
  - Rocky Mountain Power customers are significantly more likely to recall messages with content about "being Wattsmart" and "electrical safety."



#### Key Findings

- Recall of "Let's Turn the Answers On" continues to be significantly higher among Ad Aware customers, and slightly higher among Rocky Mountain Power customers.
  - "Let's Turn the Answers On" Ad Aware 28% vs. Ad Non-Aware 13%; Rocky Mountain Power 24% vs. Pacific Power 18%.
- Recall of "Being Wattsmart" remains higher among Ad Aware customers and Rocky Mountain Power customers.
  - "Being Wattsmart" Ad Aware 77% vs. Ad Non-Aware 45%; Rocky Mountain Power 70% vs. Pacific Power 54%.
- Three in ten (33%) customers report having taken action based on the advertisement or communication seen from the company. The response is consistent between utility companies.
  - Pacific Power: 32%; Rocky Mountain Power: 33%
  - The most frequently mentioned actions taken remain: <u>purchased/switched to energy efficient appliances/lights</u>, <u>turning off lights/appliances when not in use</u>, and <u>invested in the Blue Sky program</u>.
- Bill inserts, utility websites and television are the primary sources for utility information.
- One third (36%) of customers are aware that Pacific Power/Rocky Mountain Power offer energy efficiency programs.
- Among those mailing in their payment, nine in ten (89%) have used the reusable envelope.
  - Of those using the reusable envelope, 65% are "very satisfied" (8-10 ratings), and 75% "clearly understand the benefits" (8-10 ratings).
  - Over half (57%) describe the primary benefit as "reducing paper waste/saving paper." One quarter (27%) mention "save money" as the primary benefit.



#### 2010-2015: Ad Aware Customers

Ad Aware Customers Differences 2010-2015	2010	2011	2012	2013	2014	2015
% very satisfied overall with company	73%	72%	74%	72%	71%	75%
Company awareness (unaided): Pacific Power	87%	96%	89%	89%	91%	91%
Company awareness (unaided): Rocky Mountain Power	87%	91%	92%	84%	94%	91%
Top of Mind: Pacific Power	77%	90%	81%	76%	81%	83%
Top of Mind: Rocky Mountain Power	70%	73%	73%	65%	77%	78%
% who are <b>very favorable</b> toward UTILITY as a result of ad/communications	34%	36%	35%	33%	15%	28%
% who see, hear or read UTILITY advertisements via TV	61%	60%	47%	56%	37%	37%
% who see, hear or read <i>UTILITY</i> advertisements via bill inserts	19%	25%	31%	31%	31%	31%
% who see, hear or read UTILITY advertisements via direct mail	10%	11%	17%	20%	15%	20%
% who recall message of renewable or alternative energy (unaided)	13%	16%	8%	9%	10%	6%
% who recall "Let's Turn the Answers On"	33%	44%	35%	32%	28%	28%
% who recall "Being Wattsmart"	n/a	65%	66%	70%	67%	77%
% who took action based on advertisement	26%	31%	30%	32%	32%	33%



### 2010-2015 : Ad Non-Aware Customers

Ad Non-Aware Customers  Differences 2010-2015	2010	2011	2012	2013	2014	2015
Company awareness (aided + unaided): Pacific Power	66%	88%	84%	86%	81%	85%
Company awareness (aided + unaided): Rocky Mountain Power	62%	90%	83%	80%	85%	83%
Unaided company awareness: Pacific Power	55%	79%	73%	73%	73%	71%
Unaided company awareness: Rocky Mountain Power	44%	77%	66%	62%	74%	68%
% who rely on TV for news and current events	62%	57%	61%	52%	49%	41%



#### Ad Aware vs. Ad Non-Aware Customers

2015 Differences between Ad Aware & Ad Non-Aware Customers	Ad Aware	Ad Non-Aware
% very satisfied overall with company	76%	73%
% recall "Let's Turn the Answers On"	28%	13%
% recall "Being Wattsmart"	77%	45%
% who say that their satisfaction with the UTILITY has increased over the past year	11%	7%
% strongly agree that UTILITY delivers excellent customer service	71%	67%
% who strongly agree <i>UTILITY</i> is committed to keeping customers safe around electricity	75%	74%
% who strongly agree UTILITY has plans to meet future energy needs	52%	43%
% who strongly agree UTILITY has programs that help protect the environment	42%	35%
% aware of any energy efficiency programs currently offered by UTILITY	37%	34%

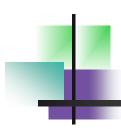


#### Ad Aware vs. Ad Non-Aware Customers

2015 Differences between Ad Aware & Ad Non-Aware Customers	Ad Aware	Ad Non-Aware
% who typically rely on <b>television</b> as a source for information about news and current events	48%	41%
% who typically rely on <b>newspaper</b> as a source for information about news and current events	28%	20%
% who typically rely on <b>radio</b> as a source for information about news and current events	15%	15%
% who typically rely on <b>bill inserts</b> as a source for information about UTILITY	29%	30%
% who typically rely on <b>television</b> as a source for information about UTILITY	20%	7%
% who typically rely on <b>newspaper</b> as a source for information about UTILITY	10%	7%
% who have visited the UTILITY website	46%	31%



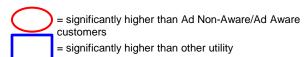
### 2015 Demographics



### **Demographics**

	Ad A	ware	Ad Non-Aware			
Customer Tenure	Pacific Power (n=208)	Rocky Mt. Power (n=201)	Pacific Power (n=153)	Rocky Mt. Power (n=151)		
1-4 years	22%	22%	24%	27%		
5-9 years	15%	16%	12%	14%		
10-19 years	17%	18%	22%	12%		
20-29 years	13%	15%	12%	17%		
30-39 years	11%	11%	11%	10%		
40-49 years	10%	7%	8%	8%		
50+ years	13%	9%	11%	13%		

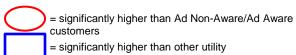
	Ad A	ware	Ad Non-Aware		
Gender	Pacific Power (n=293)	Rocky Mt. Power (n=396)	Pacific Power (n=197)	Rocky Mt. Power (n=183)	
Male	50%	57%	53%	56%	
Female	50%	43%	47%	44%	





	Ad A	ware	Ad Non-Aware		
Age	Pacific Power (n=208)	Rocky Mt. Power (n=201)	Pacific Power (n=153)	Rocky Mt. Power (n=151)	
18-34	22%	26%	20%	25%	
35-54	23%	34%	20%	28%	
55+	53%	39%	54%	45%	
Refused	2%	1%	6%	2%	

	Ad A	ware	Ad Non-Aware		
Income	Pacific Power (n=208)	Rocky Mt. Power (n=201)	Pacific Power (n=153)	Rocky Mt. Power (n=151)	
Less than \$15,000	13%	6%	15%	9%	
\$15-\$30,000	25%	13%	14%	19%	
\$30-\$50,000	20%	21%	20%	18%	
\$50-\$75,000	13%	24%	14%	18%	
\$75-\$100,000	11%	12%	10%	11%	
Over \$100,000	9%	11%	8%	11%	
Don't know	1%	1%	3%	3%	
Refused	8%	11%	15%	12%	





### **Appendix: Tracking Slides**

### Top of Mind Unaided Company Awareness 2012-2015

- Top of mind awareness for both Pacific Power and Rocky Mountain Power remains high.
  - 2015 top of mind awareness of Pacific Power and Rocky Mountain Power is consistent with 2014 levels.

2012 Company Awareness	Ad A	ware	Ad Non-Aware			
First Mention	Pacific Power (n=288)	Rocky Mt. Power (n=261)	Pacific Power (n=206)	Rocky Mt. Power (n=189)		
Pacific Power/PPL	81%	3%	73%	4%		
Rocky Mountain Power/Utah Power		73%	1%	66%		

2013 Company Awareness	Ad A	ware	Ad Non-Aware		
First Mention	Pacific Power (n=239)	Rocky Mt. Power (n=267)	Pacific Power (n=170)	Rocky Mt. Power (n=163)	
Pacific Power/PPL	78%	1%	73%	4%	
Rocky Mountain Power/Utah Power		67%	1%	62%	

2014 Company Awareness	Ad A	ware	Ad Non-Aware		
First Mention	Pacific Power (n=264)	Rocky Mt. Power (n=340)	Pacific Power (n=232)	Rocky Mt. Power (n=178)	
Pacific Power/PPL	81%	2%	73%	2%	
Rocky Mountain Power/Utah Power		77%		74%	

2015 Company Awareness	Ad A	ware	Ad Non-Aware		
First Mention	Pacific Power (n=293)	Rocky Mt. Power (n=396)	Pacific Power (n=197)	Rocky Mt. Power (n=183)	
Pacific Power/PPL	83%	2%	71%	1%	
Rocky Mountain Power/Utah Power		78%	2%	68%	



#### Total Unaided Company Awareness 2012 - 2015

Total awareness across both utilities has remained consistent compared to 2014.

2012 Company Awareness	Ad A	ware	Ad Non-Aware		
(Top of mind + others = total awareness)	Pacific Power (n=288)	Rocky Mt. Power (n=261)	Pacific Power (n=206)	Rocky Mt. Power (n=189)	
Pacific Power/PPL	89%	4%	84%	8%	
Rocky Mountain Power/Utah Power	<1%	92%	1%	83%	

2013 Company Awareness	Ad A	ware	Ad Non-Aware			
(Top of mind + others = total awareness)	Pacific Power (n=239)	Rocky Mt. Power (n=267)	Pacific Power (n=170)	Rocky Mt. Power (n=163)		
Pacific Power/PPL	89%	1%	86%	5%		
Rocky Mountain Power/Utah Power	0%	84%	1%	80%		

2014 Company Awareness	Ad A	ware	Ad Non-Aware		
(Top of mind + others = total awareness)	Pacific Power (n=264)	Rocky Mt. Power (n=340)	Pacific Power (n=232)	Rocky Mt. Power (n=178)	
Pacific Power/PPL	91%	2%	81%	2%	
Rocky Mountain Power/Utah Power	1%	94%	0%	85%	

2015 Company Awareness	Ad A	ware	Ad Non-Aware			
(Top of mind + others = total awareness)	Pacific Power (n=293)	Rocky Mt. Power (n=396)	Pacific Power (n=197)	Rocky Mt. Power (n=183)		
Pacific Power/PPL	91%	4%	85%	3%		
Rocky Mountain Power/Utah Power	1%	91%	3%	83%		



## Advertising & Communication Channels 2010-2015

- Among Rocky Mountain Power customers, recall of newspaper, radio, and website advertisements or communications decreased significantly between 2014 and 2015.
- Advertising/communication channel recall has not changed significantly from 2014 to 2015 among Pacific Power customers.

	20	10	20	11	20	12	20	13	20	14	20	15
Advertising & Communication Channels	Pacific Power	Rocky Mt. Power										
	(n=220)	(n=218)	(n=300)	(n=300)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=208)	(n=201)
Television	49%	69%	53%	65%	30%	58%	32%	46%	23%	48%	30%	42%
Bill insert	24%	15%	33%	18%	39%	24%	28%	18%	40%	24%	38%	27%
Direct mail	11%	10%	14%	10%	20%	14%	17%	14%	18%	13%	23%	18%
Email		1						-	-1	1	13%	11%
Newspaper	27%	23%	18%	28%	18%	14%	16%	12%	18%	18%	13%	8%
Radio	5%	16%	8%	15%	6%	10%	6%	14%	4%	12%	3%	4%
Website (PP/RMP)	5%	5%	3%	4%	3%	4%	6%	5%	4%	8%	5%	3%
Billboard	2%	4%	3%	4%	4%	10%	2%	6%	4%	7%	2%	4%
Magazine	2%	0%	1%	1%	3%	<1%	2%	2%	2%	2%	1%	2%
Other channels	2%	4%	3%	6%	11%	11%	12%	15%	11%	10%	3%	6%
Don't remember/Don't know	8%	5%	2%	3%	4%	4%	6%	4%	7%	4%	1%	4%



### Pacific Power - Unaided & Aided Message Recall 2010-2015

	Pacific Power											
Messages			Una	ided			Aided					
Recalled	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
	(n=220)	(n=300)	(n=200)	(n=200)	(n=200)	(n=208)	(n=220)	(n=300)	(n=200)	(n=200)	(n=200)	(n=208)
Using energy wisely	14%	15%	12%	12%	15%	17%	49%	54%	48%	45%	49%	44%
Energy efficiency programs	17%	19%	17%	21%	17%	15%	50%	48%	40%	34%	45%	42%
Renewable or alternative energy	20%	22%	12%	16%	14%	8%	41%	43%	38%	43%	43%	43%
Billing or energy assistance	7%	6%	12%	4%	6%	5%	35%	38%	36%	40%	44%	42%
Blue Sky Renewable Energy*						7%						46%
Being Wattsmart	n/a	3%	4%	2%	4%	5%	n/a	28%	34%	34%	43%	43%
Electrical safety	12%	9%	6%	4%	2%	4%	38%	37%	32%	28%	39%	37%
Preparing for power outages	1%	4%	1%	1%	2%	1%	34%	35%	39%	29%	39%	38%
Working to keep your power on	1%	5%	2%	<1%	3%	1%	29%	37%	25%	22%	29%	30%
Programs such as equal pay/customer guarantees	4%	3%	1%	4%	6%	1%	25%	28%	28%	20%	23%	32%
Planning for your future energy needs	5%	3%	2%	2%	2%	1%	26%	34%	21%	27%	26%	28%
System/infrastructure improvements	4%	2%	2%	<1%	2%	2%	10%	11%	10%	8%	8%	25%
Environment friendly	2%	5%	2%	3%	5%	1%	n/a	n/a	n/a	n/a	n/a	n/a
Don't remember/Don't know	36%	37%	33%	30%	33%	39%	10%	5%	8%	11%	6%	16%

Overall, the three communication messages cited most often by Pacific Power customers are:

- Using energy wisely
- Energy efficiency programs
- Blue Sky Renewable Energy

Aided recall of both "programs such as equal pay" and "system infrastructure improvements" increased significantly from 2014.

\*Blue Sky Renewable Energy was introduced 2015.

BLUE = significantly higher than 2014

RED = significantly lower than 2014

Q6 What types of messages or topics do you remember from UTILITY's advertisements or communications?

Q7 Do you remember any of the following messages or topics from the UTILITY advertisements or communications?

## Rocky Mt. Power - Unaided & Aided Message Recall 2010-2015

					R	ocky M	lt. Powe	er				
Messages Recalled			Una	ided					Aic	ded		
wiessages Recalled	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
	(n=218)	(n=300)	(n=200)	(n=200)	(n=200)	(n=201)	(n=218)	(n=300)	(n=200)	(n=200)	(n=200)	(n=201)
Using energy wisely	21%	19%	20%	18%	19%	18%	57%	59%	47%	50%	53%	41%
Being Wattsmart	n/a	3%	4%	6%	7%	7%	n/a	62%	58%	60%	59%	57%
Energy efficiency programs	26%	24%	18%	22%	14%	13%	51%	51%	44%	41%	50%	42%
Billing or energy assistance	2%	5%	6%	2%	8%	4%	28%	30%	30%	29%	40%	26%
Renewable or alternative energy	7%	13%	5%	4%	7%	4%	44%	38%	36%	38%	39%	35%
Working to keep your power on	4%	4%	2%	1%	5%	3%	36%	46%	32%	30%	36%	24%
Blue Sky Renewable Energy*						4%	-					36%
Electrical safety	9%	11%	8%	8%	8%	9%	39%	31%	30%	28%	33%	27%
Programs such as equal pay/customer guarantees	7%	2%	3%	1%	3%	0%	29%	37%	30%	28%	35%	25%
Planning for your future energy needs	3%	1%	<1%	1%	3%	1%	32%	32%	28%	23%	31%	20%
Preparing for power outages	2%	2%	4%	<1%	3%	3%	26%	27%	32%	34%	32%	28%
System/infrastructure improvements	2%	2%	1%	<1%	1%	2%	11%	18%	12%	12%	13%	17%
Environment friendly	2%	4%	1%	1%	1%	0%	n/a	n/a	n/a	n/a	n/a	n/a
Don't remember/Don't know	33%	32%	36%	25%	31%	34%	7%	2%	8%	8%	4%	17%

Overall, the three communication messages cited most often by Rocky Mountain Power customers are:

- Being Wattsmart
- **Energy efficiency** programs
- Using energy wisely

Unaided and aided mention of "billing or energy assistance," "Working to keep your power on," "Using energy wisely," "Planning for future energy needs" and "Programs such as equal pay" all decreased from 2014 in aided awareness.

\*Blue Sky Renewable Energy was introduced 2015.

BLUE = significantly higher than 2014

Q6 What types of messages or topics do you remember from UTILITY's advertisements or communications?

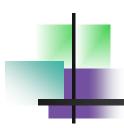
Do you remember any of the following messages or topics from the UTILITY advertisements or communications? Q7

## Importance of Communication Messages 2010-2015

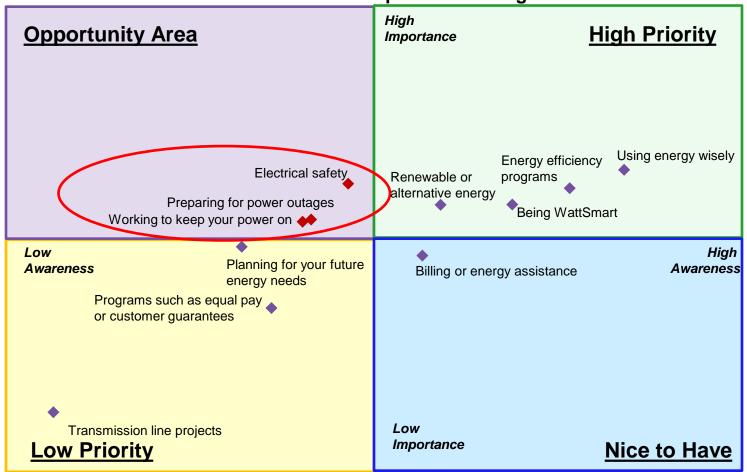
Among Rocky Mountain Power customers, the percentage rating "system/infrastructure improvements" as very important decreased significantly between 2014 and 2015.

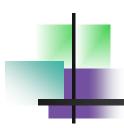
Advertising &	20	10	20	11	2	012	20	13	20	14	20	15
Communication Channels	Pacific Power	Rocky Mt. Power	Pacific Power	Rocky Mt. Power	Pacifi c Power	Rocky Mt. Power	Pacific Power	Rocky Mt. Power	Pacific Power	Rocky Mt. Power	Pacific Power	Rocky Mt. Power
(% "very important")	(n=220)	(n=218)	(n=300)	(n=300)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=200)	(n=208)	(n=201)
Electrical safety	75%	73%	73%	70%	72%	66%	66%	72%	72%	69%	77%	66%
Using energy wisely	69%	67%	69%	66%	70%	66%	66%	70%	71%	65%	75%	65%
Energy efficiency programs	67%	58%	62%	58%	59%	58%	56%	56%	61%	60%	65%	57%
Preparing for power outages	60%	56%	55%	51%	62%	54%	54%	58%	57%	57%	59%	57%
Being Wattsmart	n/a	n/a	43%	47%	54%	47%	47%	54%	54%	48%	48%	54%
Working to keep your power on	69%	60%	58%	58%	60%	52%	60%	63%	65%	53%	62%	57%
Renewable or alternative energy	60%	53%	54%	47%	52%	46%	48%	45%	54%	46%	53%	47%
Planning for your future energy needs	46%	48%	52%	45%	41%	46%	43%	46%	44%	45%	42%	38%
Billing or energy assistance	41%	33%	43%	32%	50%	26%	40%	40%	49%	39%	44%	33%
Programs such as equal pay/customer guarantees	32%	34%	37%	33%	34%	34%	33%	34%	36%	36%	35%	34%
System/Infrastructure Improvements	27%	23%	27%	25%	24%	22%	19%	26%	22%	20%	36%	32%

Q8

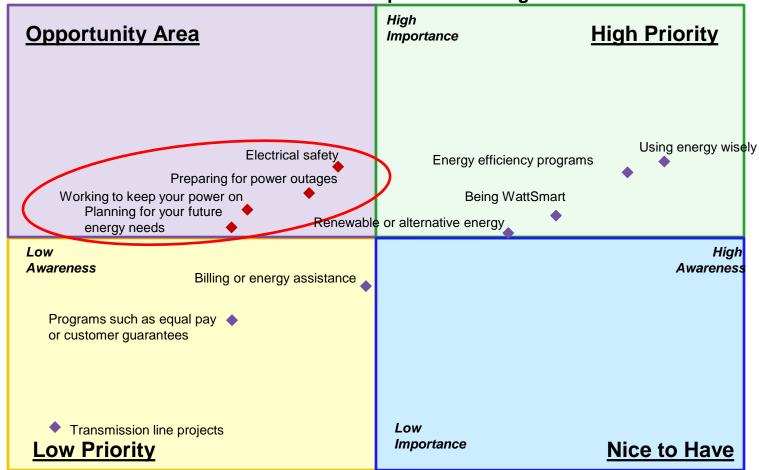


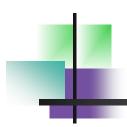
2014 Awareness vs. Importance Ratings



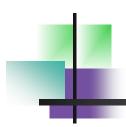


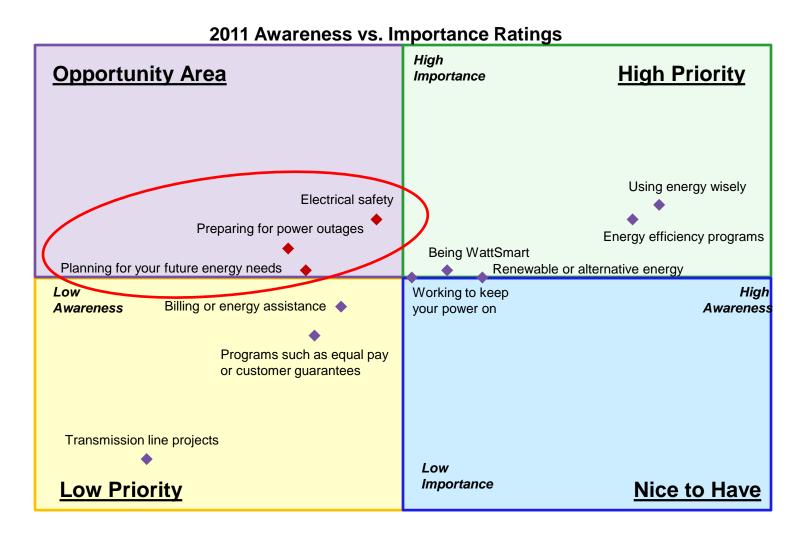
2013 Awareness vs. Importance Ratings

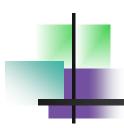


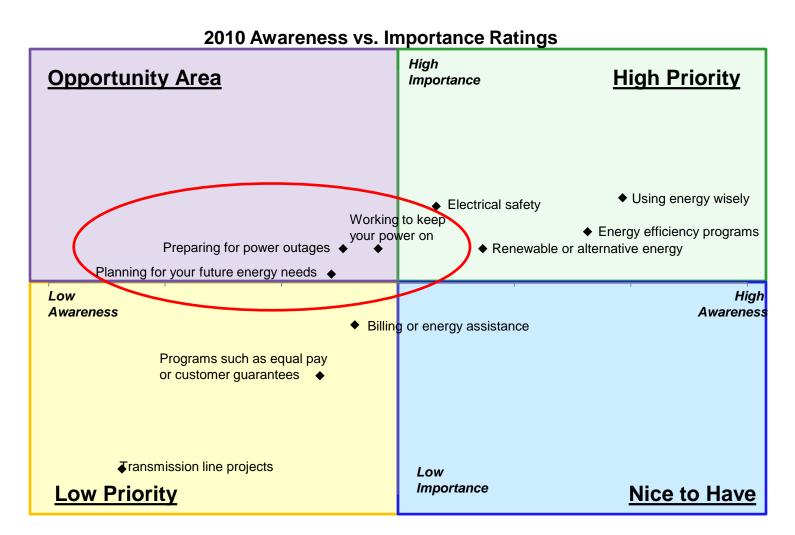


2012 Awareness vs. Importance Ratings High **Opportunity Area High Priority Importance** Using energy wisely Energy efficiency programs Electrical safety Preparing for power outages Being WattSmart Working to keep your power on Renewable or alternative energy High Low Planning for your future **Awareness** Awareness energy needs Billing or energy assistance Programs such as equal pay or customer guarantees Transmission line projects Low **Importance Low Priority Nice to Have** 











## Additional Suggested Messages 2010-2015

 Besides the 11 messages tested on the previous slides, customers were asked for other suggested messages or topics that their electric utility should be communicating to customers.

Other Important Topics	Pacific Power							Rocky Mt. Power					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015	
	(n=220)	`	,	,	`	, ,	, ,	` ,	(n=200)	` '	(n=200)	, ,	
All information provided is sufficient	15%	16%	18%	10%	24%	16%	18%	22%	13%	12%	26%	19%	
Alternative Energy/Energy Efficiency	19%	19%	11%	11%	17%	8%	18%	14%	11%	9%	13%	6%	
Breakdown of how to practice energy efficiency/info on energy efficient appliances	10%	9%	3%	5%	5%	1%	9%	6%	5%	4%	4%	2%	
Investment in alternative (green) energy sources	8%	9%	6%	5%	9%	2%	6%	7%	4%	4%	3%	2%	
Energy conservation tips	n/a	n/a	2%	2%	3%	5%	n/a	n/a	1%	0%	4%	2%	
Energy incentive programs	1%	1%	2%	1%	0%	-	3%	1%	2%	1%	2%	<1%	
Billing and Payment	17%	13%	3%	5%	5%	3%	12%	9%	5%	4%	3%	1%	
Economically sensitive billing practices/programs	10%	6%	1%	1%	1%	<1%	5%	4%	<1%	2%	2%	1%	
More detailed billing information/customer usage summaries	7%	7%	2%	4%	4%	3%	7%	5%	4%	2%	1%	-	
Corporate Information	7%	15%	8%	5%	10%	8%	8%	16%	12%	4%	9%	4%	
Information on company decisions/practices/operations	5%	5%	2%	0%	3%	3%	2%	8%	4%	1%	4%	2%	
Rate increase information	n/a	2%	2%	4%	3%	2%	n/a	0%	1%	3%	2%	-	
Customer service access	2%	3%	3%	0%	0%	1%	2%	4%	5%	0%	1%	<1%	
What makes them dependable	0%	2%	0%	0%	1%	<1%	1%	2%	1%	0%	0%	-	
Power outage information	0%	3%	2%	4%	3%	2%	1%	1%	1%	2%	2%	2%	
Energy Safety	4%	5%	2%	2%	1%	4%	5%	2%	<1%	3%	1%	3%	
Don't remember/Don't know	24%	17%	14%	48%	29%	33%	24%	21%	23%	58%	28%	36%	
None/Nothing more	22%	24%	32%	1%	10%	13%	25%	24%	31%	0%	15%	18%	

What other messages or topics do you think UTILITY should be communicating to customers in their ads and communications?

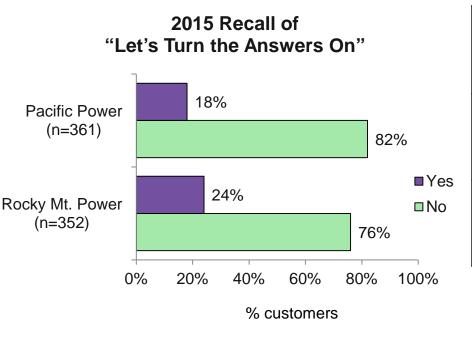
BLUE = significantly higher than 2014 RED = significantly lower than 2014

Q9

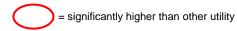


## "Let's Turn the Answers On" 2010-2015

- Rocky Mountain Power customers remain more likely than Pacific Power customers to recall communications with the message "Let's Turn the Answers On." However, awareness among Rocky Mountain Power customers has declined over the past five years.
- Among Pacific Power customers, recall of "Let's Turn the Answers On" has remained consistent since 2010.



2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Pacific Power				Pacific Power	MIT	Rocky Mt. Power	Rocky Mt. Power	Rocky Mt. Power	Rocky Mt. Power
(n=220)	(n=500)	(n=350)	(n=350)	(n=350)	(n=218)	(n=500)	(n=350)	(n=350)	(n=350)
22% yes	20% yes	19% yes	19% yes	15% yes	42% yes	37% yes	33% yes	32% yes	29% yes
78% no	80% no	81% no	81% no	85% no	58% no	63% no	67% no	68% no	71% no

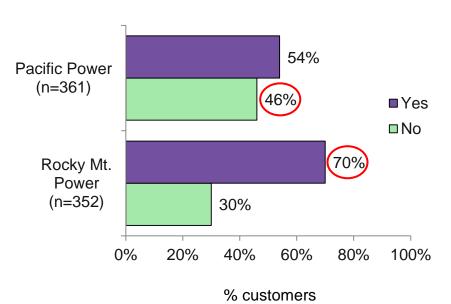




## "Being Wattsmart" 2013-2015

- Recall of "Being Wattsmart" has increased significantly among Rocky Mountain Power customers from 2014 to 2015.
  - Rocky Mountain Power customers are significantly more likely than Pacific Power customers to recall "Being Wattsmart."

2015 Recall of "Being Wattsmart"



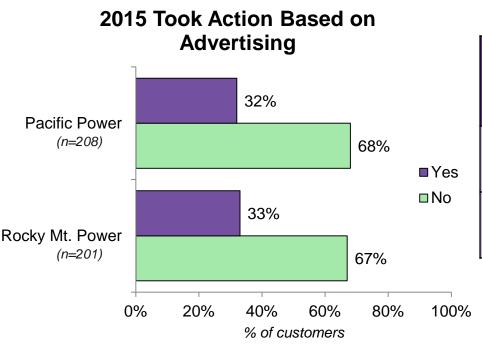
2013 Pacific Power (n=350)	2014 Pacific Power (n=350)	2013 Rocky Mt. Power (n=350)	2014 Rocky Mt. Power (n=350)
46%	49%	60%	63%
yes	yes	yes	yes
54%	51%	40%	37%
no	no	no	no

= significantly higher than other utility

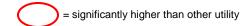


## Persuasiveness of Advertising in Call to Action 2010-2015

 For Pacific Power and Rocky Mountain Power, the percentage of customers persuaded to take action based on the advertisements remained consistent with 2014.



2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
		Pacific Power		Pacific Power	IVIT.	Rocky Mt. Power	Mt.	Rocky Mt. Power	Mt.
(n=220)	(n=300)	(n=200)	(n=200)	(n=200)	(n=218)	(n=300)	(n=200)	(n=200)	(n=200)
22% yes	21% yes	30% yes	31% yes	31% yes	30% yes	39% yes	30% yes	32% yes	33% yes
78% no	79% no	70% no	69% no	70% no	70% no	61% no	70% no	68% no	67% no





## Unaided EE Program Recall 2013-2015

Program	(	Dregoi	n	Wa	shing	ton	Ca	aliforn	ia		Utah		W	yomir	ng		Idaho	
Recall				2013														
	(n=266)	(n=266)	(n=269)	(n=62)	(n=62)	(n=209)	(n=22)*	(n=22)*	(n=24)*	(n=277)	(n=277)	(n=279)	(n=200)	(n=200)	(n=201)	(n=26)*	(n=26)*	(n=204)
Cool Keeper	5%	3%	1%	3%	0%	2%	0%	5%	0%	7%	9%	7%	6%	1%	0%	0%	0%	2%
Home Energy Savings	6%	4%	4%	0%	8%	6%	0%	14%	4%	4%	5%	5%	4%	3%	5%	4%	8%	5%
See Ya Later, Refrigerator	4%	3%	2%	3%	8%	6%	9%	0%	4%	7%	4%	4%	7%	3%	5%	0%	8%	3%
Wattsmart	4%	4%	7%	3%	8%	8%	0%	0%	4%	7%	5%	9%	5%	2%	6%	4%	4%	7%
Low Income Weatherization	6%	4%	4%	5%	2%	4%	5%	14%	4%	4%	1%	2%	5%	1%	1%	0%	8%	3%
Rebates and cashback*	6%	5%	4%	10%	2%	8%	0%	5%	4%	6%	4%	4%	3%	1%	4%	7%	8%	4%
Energy Star New Homes	6%	2%	3%	5%	6%	6%	5%	0%	8%	3%	3%	4%	2%	2%	4%	4%	0%	3%
Home Energy Reports	n/a	11%	3%	n/a	9%	4%	n/a	10%	n/a	n/a	3%	2%	n/a	2%	1%	n/a	n/a	2%
Time of Day	3%	<1%	2%	2%	2%	0%	0%	0%	0%	2%	1%	1%	0%	0%	1%	0%	8%	8%
None	75%	76%	75%	66%	74%	71%	82%	68%	79%	64%	68%	73%	77%	89%	79%	73%	73%	67%

<sup>\*</sup>CAUTION: small sample sizes

EE2 What energy efficiency or conservation programs are you aware of from UTILITY?

<sup>\*</sup>Formerly called "Cool Cash Incentive.

## Exhibit D

## Be wattsmart, Begin At Home Utah Program 2015 Report

BEWATTSMART, BEGIN AT HOME UTAH

> PROGRAM REPORT

#### Prepared for:



#### wattsmart.c@m

Michael S. Snow, Manager, Regulatory Projects

Barbara Modey, Customer and Community Communications

Rocky Mountain Power 201 South Main, Suite 2300 Salt Lake City, UT 84111

Prepared by:

Marilyn Clark

Program Director

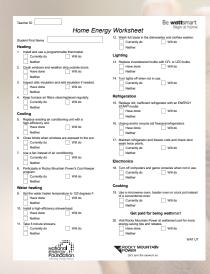
National Energy Foundation

4516 South 700 East, Suite 100

Salt Lake City, UT 84107

February 17, 2016

## Savings



# Home Energy Worksheets

Returned: 8,350 –70.5% –

# Program Evaluation Taucher Name: Sprace: Roday Mourtain Power Sprace: Roday Mourtain Power Is an effect to improve our program, we would the year adescended of the waterings, since the form in the power of the origination form. Power of the program is the effect to improve our program, we would the year adescended for the power of the program of the power form of the power of the power form of the pow

## Teacher Packets

Returned: 356 –79.64% –

## **Participants**



## Students

**– 11,843 –** 



## **Teachers**

**- 447 -**



Schools

-130 -

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#### **Program Overview**

#### **Program Administration**

National Energy Foundation (NEF) is pleased to report on activities of the Be wattsmart, Begin at home energy efficiency education program conducted during the 2015–2016 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 wattsmart, Begin at home is administered by 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 2015 Be wattsmart, 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 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 wattsmart, 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 May 2015 an invitation to register for the fall 2015 program was sent via email to all schools that had participated in 2014. In August a reminder to register email was sent to all unregistered past participating schools, and a promotional flier was sent to all qualified and unregistered teachers within the Utah Rocky Mountain service territory.

#### Program Registration

Be wattsmart, Begin at home was completely filled in September with 130 schools and a waitlist of 18 Utah schools.

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 wattsmart, Begin at home presentations were given during the period of September 21<sup>st</sup> through November 12<sup>th</sup>, 2015. 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 wattsmart, Begin at home. In addition, students took home a Student Guide and Home Energy Worksheet to share with their families. Students who returned their worksheet received 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 wattsmart, 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, *Electrical Generation* 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 4, 2015 deadline.

## Program Accomplishments - Fall 2015

- 141 Be wattsmart, Begin at home presentations completed at 130 Schools
- 18 schools waitlisted
- 11,843 students and families reached
- 447 Utah teachers reached
- 70.51% Home Energy Worksheet survey return
- \$50 Visa gift cards delivered to 327 Utah teachers
- \$25 Visa gift cards delivered to 26 Utah teachers

#### **Summary and Attachments**

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 wattsmart, 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 2015 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 2015 Participating Schools

School Name	School Address	School City	<u>State</u>
Altara Elementary	800 E 11000 S	Sandy	UT
Antelope Elementary	1810 South Main	Clearfield	UT
Arcadia Elementary	3461 West 4850 South	Taylorsville	UT
Aspen Elementary	945 West 2000 North	Orem	UT
Backman Elementary	601 N. 1500 W.	Salt Lake	UT
Blackridge	14131 Rosecrest Road	Herriman	UT
Bluffdale Elementary School	14323 S. 2700 West	Bluffdale	UT
Buffalo Point Elementary	1924 Doral Drive	Syracuse	UT
Butler Elementary	7000 S 2700 E	Cottonwood Heights	UT
Butterfield Canyon Elementary	6860 Mary Leizan Ln	Herriman	UT
Cedar Ridge Elementary	4501 W Cedar Hills Drive	Cedar Hills	UT
Cedar South Elementary	499 W 400 S	Cedar City	UT
Century Elementary	5820 North 4800 West	Bear River City	UT
Channing Hall	13515 South 150 East	Draper	UT
Cook Elementary	1175 S 1350 W	Syracuse	UT
Copper Canyon	8917 Copperwood	West Jordan	UT
Copper Hills Elementary	7635 West 3715 South	Magna	UT
Cottonwood Elementary	5205 South Holladay Blvd.	Holladay	UT
Crescent Elementary	11100 S. 230 E.	Sandy	UT
Crestview Elementary	185 West Golden Avenue	Layton	UT
Crestview Elementary School	2100 E Lincoln Lane	Holladay City	UT
D.T. Orchard Elementary	6744 West 3800 South	West Valley City	UT
Diamond Ridge	6034 6365 South Mill Valley Ln	West Valley City	UT
Eagle Bay Elementary	1933 West Clark Lane	Farmington	UT
Early Light Academy	11709 So Vadania Dr	South Jordan	UT
East Elementary	255 E.College Ave	Cedar	UT
East Layton Elementary	2470 E Cherry Ln	Layton	UT
EastLake Elementary	4389 Isla Daybreak Rd	South Jordan	UT
Eastwood	3305 South Wasatch Blvd.	Salt Lake City	UT
Elk Meadows Elementary	3448 W. 9800 S.	South Jordan	UT
Elk Run	3550 S. Helen Dr.	Magna	UT
Emerson Elementary	1017 East Harrison Ave.	Salt Lake City	UT
Enoch Elementary	4701 N WAGON WHEEL DR	Enoch	UT
Falcon Ridge	6111 W 7000 S	West Jordan	UT
Fielding Elementary	50 West Main Street	Fielding	UT
Fox Hollow Elementary	6020 W. 8200 S.	West Jordan	UT
Foxboro Elementary		North Salt Lake	
•	587 Foxboro Drive		UT
Freedom Elementary	10326 N 6800 W	Highland	UT
Gateway Preparatory Academy	201 E. Thoroughbred Way	Enoch	UT
Geneva Elementary	665 West 400 North	Orem	UT
Goshen Elementary	60 North Center	Goshen	UT
Granite Elementary	9760 S. 3100 E.	Sandy	UT
Grantsville Elementary School	50 South Park Street	Grantsville	UT
Green Acres Elementary School	640 East 1900 North	Ogden	UT
Gunnison Elem	550 So. 300 W.	Gunnison	UT
Harvest Elementary	2105 N Providence Drive	Saratoga Springs	UT
Hawthorne	1675 South 600 East	Salt Lake City	UT
Heritage Elementary	1354 W Weaver In	Layton	UT

School Name	School Address	School City	State
Heritage Elementary	925 W 3200 S	Nibley	UT
Herriman Elementary	13170 South 6000 West	Herriman	UT
Hill Field Elementary	389 S. 1000 E.	Clearfield	UT
Hillside Elementary	4283 S 6000 W	West Valley City	UT
Howard R. Driggs Elementary	4340 S. 2700 E.	Holladay	UT
JC Fremont	4249 Atherton Dr.	Taylorsville	UT
Jim Bridger Elementary	5368 West Cyclamen Way	West Jordan	UT
John Hancock	125 N 100 E	Pleasant Grove	UT
Jordan Ridge Elementary	2636 West 9800 South	South Jordan, UT	UT
Kearns-Saint Ann School	430 East 2100 South	Salt Lake City	UT
King Elementary	601 E 1000 N	Layton	UT
Knowlton Elementary	801 Shepard Lane	Farmington	UT
Lakeside Elementary	2941 West 800 North	West Point	UT
Lakeview Elementary	2025 West 5000 South	Roy	UT
Lincoln Academy	1582 W 3300 N	Pleasant Grove	UT
Lincoln Elementary I	591 W Antelope	Layton	UT
Lincoln Elementary II	550 E. Canfield Drive	Ogden	UT
Lomond View Elementary	3644 North 900 West	Pleasant View	UT
Lone Peak Elementary	11515 So. High Mesa Dr.	Sandy	UT
Mapleton Elementary	120 West Maple	Mapleton	UT
MarLon Hills	4500 Madison Ave	Ogden	UT
McKinley Elementary School	120 West 500 South	Tremonton	UT
Monte Vista	11121 S. 2700 W.	South Jordan	UT
Mountainville Academy	195 N Main St	Alpine	UT
North Park Elementary	50 East 700 North	Tremonton	UT
Oakridge Elementary	4325 South Jupiter Drive	SLC	UT
Odyssey Charter	738 East Quality Drive (700 South)	American Fork	UT
Odyssey Elementary	375 Goddard St	Ogden	UT
Oquirrh Hills Elementary	5241 s. 4280 w.	Kearns	UT
Orchard Hills Elementary	168 E 610 S	Santaquin	UT
Our Lady of Lourdes	1065 E 700 S	Salt Lake City	UT
Overlake Elementary	2052 North 170 West	Tooele	UT
Park Lane	9955 South 2300 East	Sandy	UT
Peruvian Park Elementary	1545 E 8425 S	Sandy	UT
Philo T Farnsworth	3751 S Sunnyvale Drive	West Valley City	UT
Plymouth Elementary	5220 S. 1470 W.	Taylorsville	UT
Providence Hall Elementary	4795 W. Patriot Drive	Herriman	UT
Quest Academy	4862 W 4000 S	West Haven	UT
Ridgecrest Elementary	7200 S 1800 E	Cottonwood Heights	UT
Riverside	8737 S. 1220 W.	West Jordan	UT
Rolling Meadows Elementary	2950 Whitehall Drive	West Valley City	UT
Rose Creek Elementary	12812 S 3600 W	Riverton	UT
Rosecrest	2420 Fisher Lane	Salt Lake City	UT
Roy	2888 W. 5600 S.	Roy	UT
Sand Springs Elementary	242 N 3200 W	Layton	UT
Sandy Elementary	8725 South 280 East	Sandy	UT
Scera Park Elementary	450 South 400 East	Orem	UT
Settlement Canyon Elementary	935 W Timpie Rd	Tooele	UT

School Name	School Address	School City	State
Silver Crest Elementary	12937 South Elementary Drive	Herriman	UT
Silver Hills Elementary	5770 West 5100 South	SLC	UT
South Clearfield	990 E 700 S	Clearfield	UT
South Weber Elementary	1285 E. Lester Dr.	South Weber	UT
Spectrum Academy	575 N. Cutler Drive	North Salt lake	UT
St Francis Xavier Catholic School	4501 West 5215 South	Kearns	UT
Stansbury Elementary	3050 S. 2700 W.	West Valley City	UT
Summit Academy Bluffdale	15327 S. 1000 W.	Bluffdale	UT
Summit Academy Draper Campus	1285 EAST 13200 SOUTH	DRAPER	UT
Summit School	80 West Center	Smithfield	UT
Sunrise Elementary	1520 E. 11265 S.	Sandy	UT
Sunset Elementary	2014 N 250 W	Sunset	UT
Taylor Canyon Elementary	2130 Taylor Ave	Ogden	UT
Taylorsville Elementary	2010 Mantle Ave.	Taylorsville	UT
Three Mile Creek Elementary	2625 s 1050 w	Perry	UT
Upland Terrace	3700 Sunnydale Drive	Salt Lake City	UT
Vae View Elementary	1750 W 1600 North	Layton	UT
Valley View Elementary	941 Orchard Drive	Pleasant Grove	UT
Voyage Academy	1891 North 1500 West	Clinton	UT
Washington Elementary	420 N 200 W	Salt Lake City	UT
Wellsville Elementary	90 East 100 South	Wellsville	UT
West Clinton Elemetary	2826 W 1800 N	Clinton	UT
West Jordan Elementary	7220 South 2370 West	West Jordan	UT
West Kearns Elementary	4900 South 4620 West	Kearns	UT
West Point Elementary	3788 W. 300 N.	West Point	UT
West Valley Elementary	6049 W. Brud Dr.	WVC	UT
Westbrook Elementary	3451 West 6200 South	Taylorsville	UT
Westland Elementary	2925 West 7180 South	West Jordan	UT
Westmore Elementary	1150 S. Main Street	Orem	UT
Whittier Elementary	3585 S 6000 W	West Valley	UT
Windsor	1315 North Main	Orem	UT
Woodrow Wilson	2567 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 wattsmart, Begin at home** is an energy education program sponsored by Rocky Mountain Power that is available to you in the fall of 2015. 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 60-minute educational presentation with FREE wattsmart energy

education posters, activities and student materials.

When: September 21 - November 13, 2015

Where: Your school

Who: Fifth-grade students and their teachers

**How:** Enroll at your earliest convenience to ensure a spot at:

wattsmart.com/begin or email patti@nef1.org.





wattsmart.c⊕m

 $\hbox{@ 2015}$  Rocky Mountain Power  $\,$  wattsmart is registered in U.S. Patent and Trademark Office



Dear Be wattsmart, Begin at home program participant:

Thank you for participating in the Be *watt*smart, Begin at home program. Rocky Mountain Power is once again sponsoring this energy education program for the 2015-16 school year.

As a former program participant, you have the opportunity to enroll your fifth-grade class in advance for the fall 2015 Be *watt*smart, Begin at home program.

The 60-minute school presentations include **FREE** wattsmart energy education posters, activities and student materials. They will be scheduled during the weeks of **September 21 - November 13, 2015**. Teachers may qualify to receive a minigrant of up to \$50 depending upon participation.

Register soon at: <u>wattsmart.com/begin</u> to ensure your 2015 participation or email patti@nef1.org.

Thank you,





wattsmart.c@m

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#### **Program Documents**

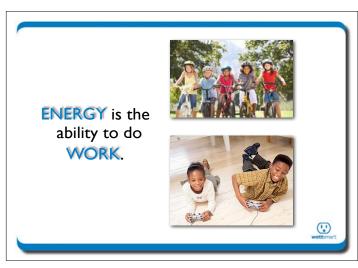
Keynote Presentation





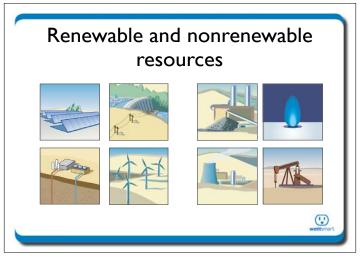
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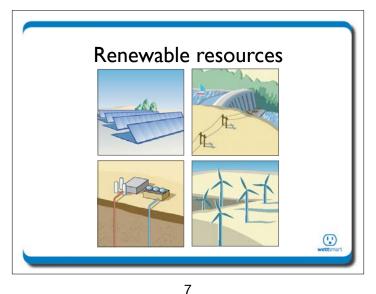


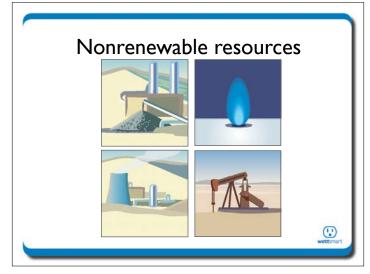


3











• 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.

wattsma

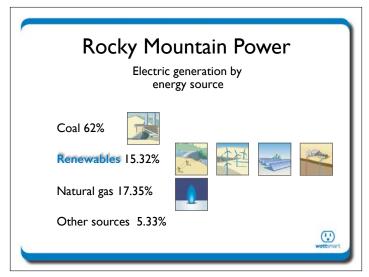
#### Let's LINGO

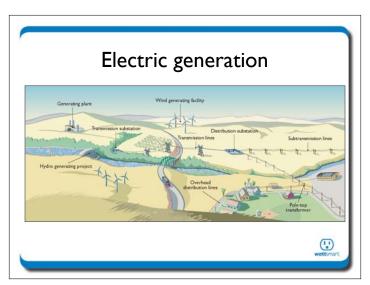
Find the words on your LINGO board that match these definitions:

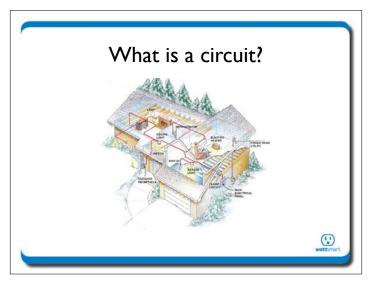
- The ability to do work. Energy
- · A resource often found with oil. Natural gas
- A secondary energy source. **Electricity**
- Something useful from the earth or the sun. **Natural resource**

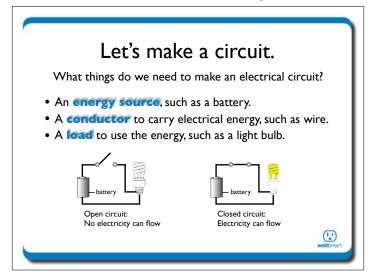
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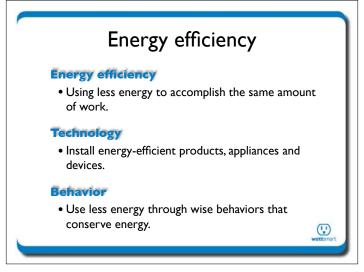
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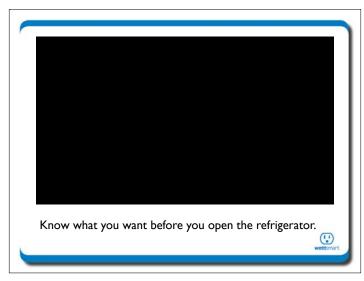






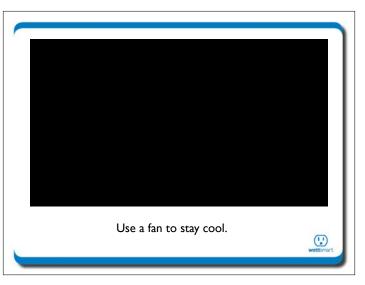


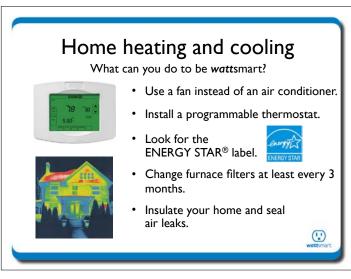


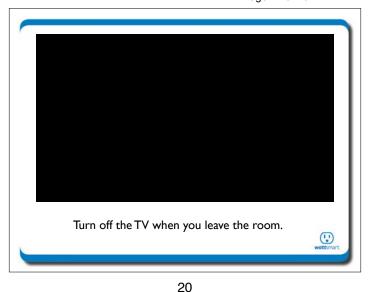


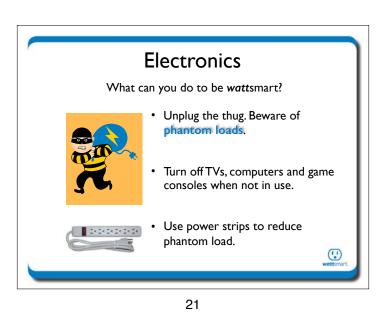
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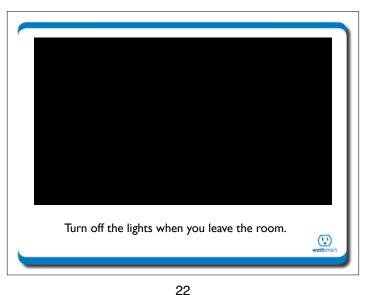


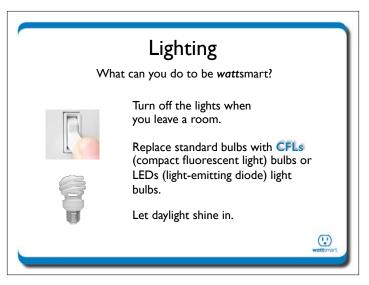


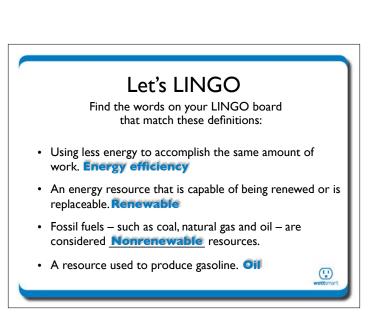


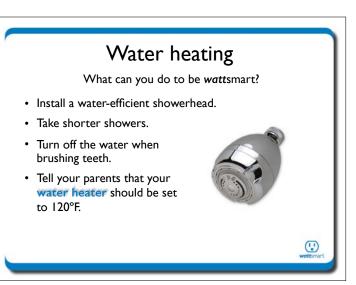




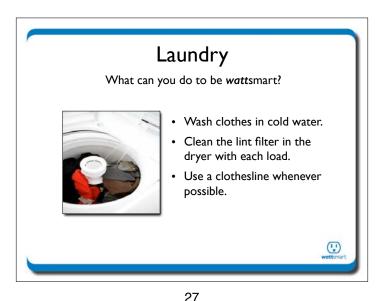


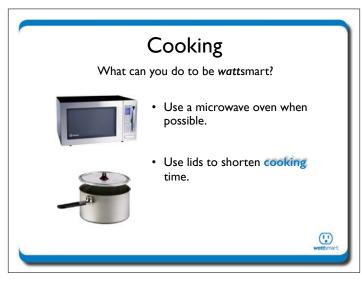




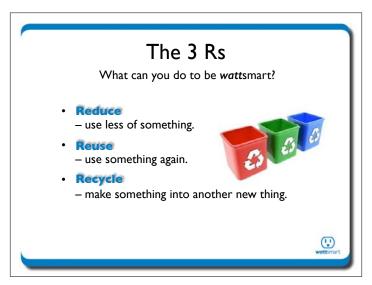








28





## What have we done today?

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



(1)

## Engage

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

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

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

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#### Teacher Program Implementation Steps

- I. 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 Thanks a "Watt!" 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 Worksheets)
- 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 *Thanks a "Watt!" Card* to Rocky Mountain Power.
- 6. Mail in the self-addressed, postage-paid envelope:
  - All completed Home Energy Worksheets
  - The Thanks a "Watt!" Card
  - The Program Evaluation form

To thank you for postmarking your envelope by December 4, 2015, you will receive a Visa gift card for classroom use.

**80% 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 Patti Clark at **patti@nef1.org**.

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## **ATTENTION TEACHERS!**



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

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

Postmark due date:

December 4, 2015

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 Patti at patti@nef1.org.







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#### 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

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.



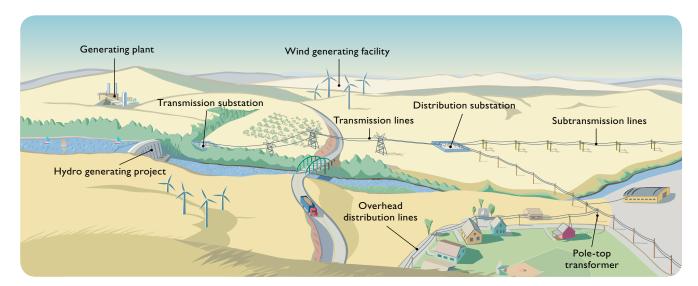
**Electricity** is the most abundant **secondary energy resource** used. It is the flow of electrical power or charge. It occurs in nature as lightning and static electricity. A generator uses energy resources to create mechanical energy that is then converted into electrical energy.

# 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**

Rocky Mountain Power (2014 basic fuel mix)*	United States (U.S. EPA, 2013 data)
62.00%	39%
17.35%	27%
15.32%	12%
ic 6.33%	7%
8.09%	4%
0.48%	1%
0.39%	
0.03%	0%
0.00%	19%
5.33%	3%
100%	100%
	(2014 basic fuel mix)*  62.00%  17.35%  15.32%  6.33%  8.09%  0.48%  0.39%  0.03%  0.00%  5.33%

\*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, 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 purchoses 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 most used incandescent bulbs with CFLs (compact fluorescent light) or LEDs (light-emitting diodes) and save \$5 to \$8 per year per bulb. These bulbs use at least 75 percent less 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 **www.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.
- Recycle old freezers and refrigerators. Rocky Mountain Power's See ya later, refrigerator® program will pick them up and give you \$30. Call toll-free 866-899-5539 to schedule a pickup.

#### 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.

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

TABLE I										
Location	Incandescent	<b>P</b>	CFL	•	LED	Ţ				
Bedroom I										
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.
- 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.
- 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									
	Α	В	С						
	Number of bulbs from Table I	Annual cost of electricity for one bulb	Annual cost of electricity for lighting						
Incandescent		× \$4.68							
CFL		× \$0.96							
LED		× \$0.60							
TOTAL									
	TAB	SLE 3							
	Е	F	G						
All CFLs	<b>\</b>	× \$0.96	Annual cost of						
			electricity with only CFLs						
	<b>\</b>								
All LEDs		× \$0.60	Annual cost of electricity with only						

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 2015 (12 months ending 2014).

# Be wattsmart - 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.

**LEDs** 









Let's turn the answers on.

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# Be wattsmart Begin at home

#### **TEACHER GUIDE**







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 wattsmart, Begin at home** reinforces important electrical concepts from your curriculum.

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

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

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## STEM Correlations

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

		Scier	ice			Tech	nolo	gy		Eng	ineeı	ring			Ma	ıth	
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													
Energy Ticket	X	×		X				×						X	X	X	X
The Search for Energy	X	×	X	X										X		X	X
Where do Fossil Fuels Come From?	×	×	×					×						×	×		
Energy for Electricity	X	×	X	X			X										
Insulation Tests	X	×	X	X			X	X		X	X	X	X	X	X	X	X
How Bright Is Your Light?	×	×	×				×		×					×		×	×
Energy in Math														X		X	X

## **Section One:**

# Energy Efficiency

**Objectives:** 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:

- I. 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:

- I. 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:

- I. 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 the 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 class' 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:

- I. 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.

ENERGY TICK	

ENERGYTICKET

This ticket allows

one energy use.

student name

This ticket allows

student name

# ENERGYTICKET

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one energy use.

student name

# ENERGY TICKET

This ticket allows one energy use.

student name

# student name

8

# 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:

- I. 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

#### Objectives:

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:

- I. Have students keep track of each paper product that they use during I 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 1 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 to use 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 I ton of paper saves:
  - Enough energy to power the average American home for 6 months.
  - 7,000 gallons of water
  - 3.3 cubic yards of landfill space
  - I 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%) and water (80%) "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

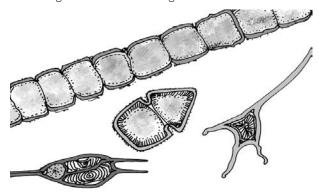
#### Math

- Numbers and Operations
- Measurement

#### Procedure:

- I. 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

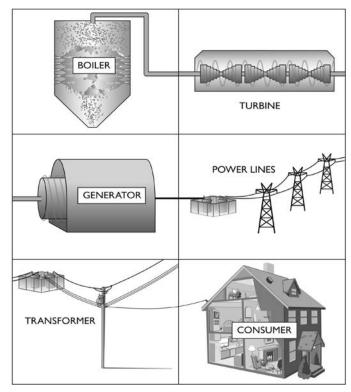
#### Procedure:

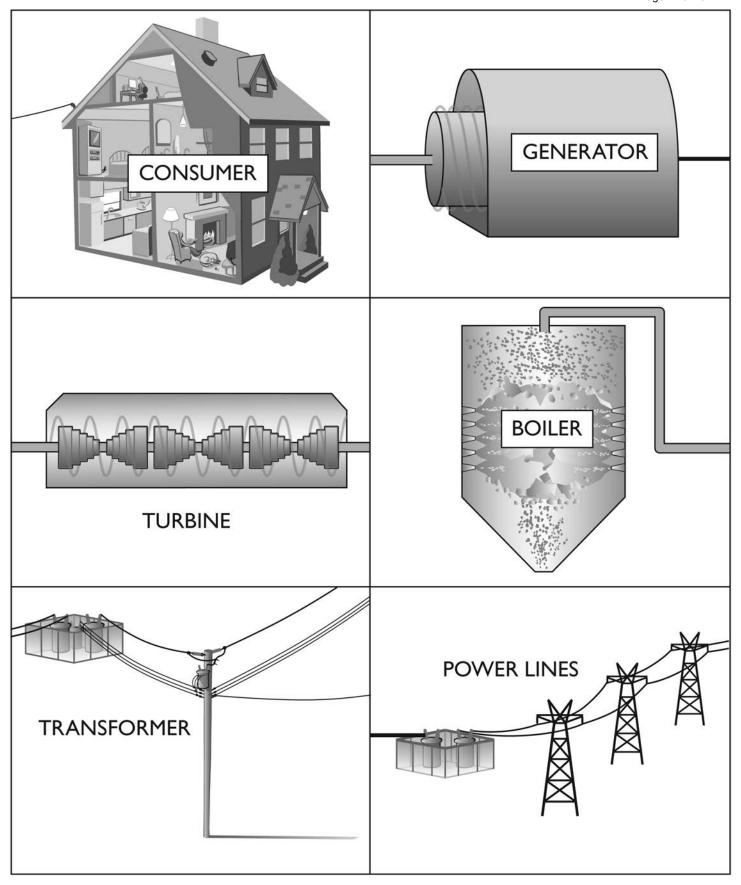
- I. Ask students how their lives would be different without electricity. Where does electricity come from?
- 2. Pass out a copy of the "Electrical Generation Puzzle" found on the following page. Have students cut each part of the puzzle (transformer, turbine, generator, boiler, power lines and consumer)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

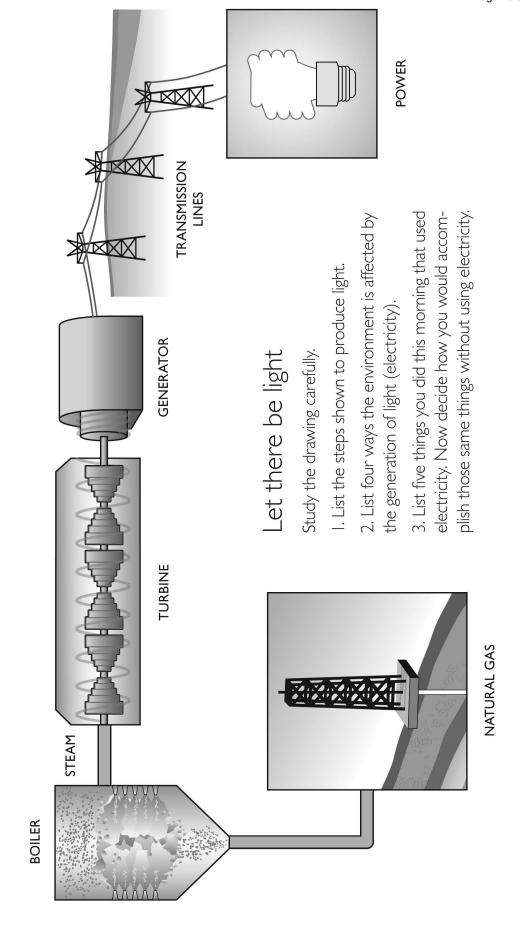
- 3. Go through each puzzle piece, explaining the process of each step:
  - Boiler converts chemical energy from fuel (fossil fuels, biomass, hydrogen) to thermal energy, changing water to steam
  - Turbine turned by steam, converting thermal energy to mechanical energy
  - Generator turned by turbine, 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



# **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?

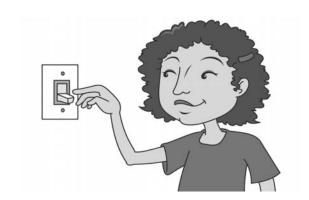
#### Optional activity:

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

	Yes	No
I. Are outside doors weather stripped?		
<ol><li>Are windows caulked to prevent air leaks?</li></ol>		
<ol><li>Are lights turned off when no one needs them?</li></ol>		
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:

- I. 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

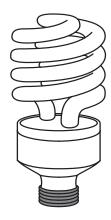
• Historical Perspective

#### Math

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

#### Procedure:

- I. 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 5 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 – 85 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**

1	M		L
	ľ	aτ	r

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

I. 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:
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.  \$\Begin{align*} \$100 & \$240 & \$525 & \$525 & \$525 & \$57,000 & \$100
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

	energy than Maggie. Maggie saved less energy than Jessie. Karen saved more energy than Jessie. List the kids' names ir order of how much energy they saved, least to most:
	<ul> <li>☐ Jessie, Karen, Maggie, Michael</li> <li>■ Maggie, Michael, Jessie, Karen</li> <li>☐ Michael, Jessie, Maggie, Karen</li> <li>☐ Maggie, Karen, Michael, Jessie</li> </ul>
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.  \$\Bigci \\$100 \$\Bigci \\$240 \$\Bigci \\$284 \$\Bigci \\$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%

I. Jessie saved more energy than Michael. Michael saved more

# Be wattsmart, Begin at home Poster

#### Materials:

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

#### Instructions:

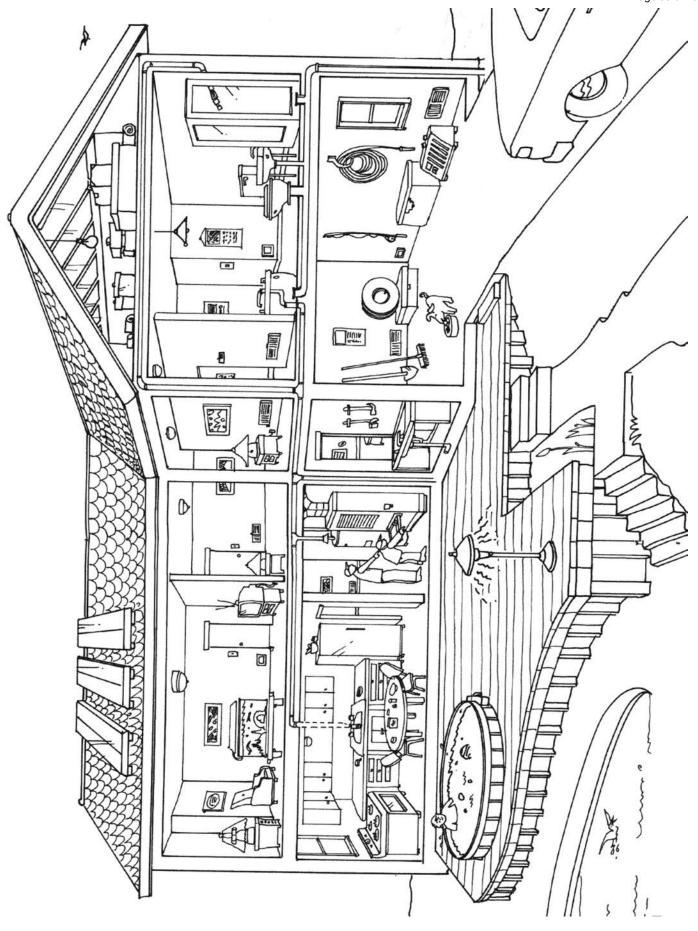
- Add or color the items below. You may want to do different items each day as you cover different topics: electricity, natural gas, water, etc.
- Add a bicycle.
- Add some recycling bins in the garage.
- Add some trees to shade the house.
- Add a ceiling or floor fan to the home for cooling.
- Put a 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<sub>2</sub>) and other greenhouse gases you generate annually. The lower your footprint, the better!







wattsmart.c@m



Let's turn the answers on.

#### Lingo Card

L		N	G	0
Water Heater	Natural Gas	Natural Resource	Incandescent	Reduce
Reuse	Phantom Load	Oil	Coal	ENERGY STAR®
Renewable	Energy	Be <b>watt</b> smart Begin at home	Turn It Off!	Uranium
Energy Efficiency	CFL	Recycle	68 Degrees	Embodied Energy
Cooking	78 Degrees	Solar	Thermostat	Electricity

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L	I	N	G	0
Coal	Natural Gas	Solar	Turn It Off!	Renewable
Water Heater	Nonrenewable	Nonrenewable Phantom Load Electric		Reuse
Energy	Oil	Be <b>watt</b> smart Begin at home	68 Degrees	Cooking
Thermostat	Incandescent	Recycle	Uranium	Natural Resource
Reduce	78 Degrees	Embodied Energy	CFL	Energy Efficiency

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L	I	N	G	0	
Reuse	Natural Gas	Phantom Load	CFL	78 Degrees	
Cooking	Electricity	Renewable	Recycle	68 Degrees	
Natural Resource	Water Heater	Be <b>watt</b> smart Begin at home	ENERGY STAR®	Nonrenewable	
Embodied Energy	Coal	Energy Efficiency	Heating	Incandescent	
Thermostat	Thermostat Reduce		Solar	Uranium	

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L	I	N	G	0	
Natural Resource	Water Heater	Natural Gas	Thermostat	78 Degrees	
Turn It Off!	Reduce	Oil	Embodied Energy	Cooking	
Phantom Load	ENERGY STAR®	Be <b>watt</b> smart Begin at home	Uranium	Recycle	
Energy	CFL	68 Degrees	Energy Efficiency	Heating	
Electricity	Renewable	Incandescent	Reuse	Solar	

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#### Utah Core Curriculum Correlations

Be <b>watt</b> 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	
Standard 1: Chemical Change	Evidence of a chemical reaction, daily life example, compare to physical change							3,c,d		
Standard 4: Electricity	Objective 2: Behavior of current electricity									
Earth Day Every Day	Classroom and community projects improve local environment	х	Х	x	x	x	x			
Social Studies										
Standard 5: US Role as a World Power	<b>Objective 3:</b> Current world issue and how US 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 <b>watt</b> 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 wattsmart, 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	<b>Objective 3:</b> Current world issue and how US can be part of the solution					3b	3b	3b	3b	
Math (Common	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				_



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!







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#### **Teacher Evaluation**

# **Program Evaluation**

Teacher Name:																	
School:																	
Sponsor: Rocky M	lountai	n Powe	er														
Be <b>watt</b> smart	е	at hor returr <i>Work</i>	effort to me. Plea the forr sheets y	ise take n in the ou colle	a few m postage cted and	ninutes e-paid	to fill envelo	out thi pe alo	s eval	uation	n form stude	. Upo ent <i>H</i> o	on co	omp	letion,		
Please mark the b	ox that	t best o	describes	s your o	pinion.		0.1					ъ.			0	ъ.	
The materials wer	o attra	ctive a	nd easy:	to use			Stron	gly Agre	е	Agree	9	Dis	sagree	9	Strongly	/ Disa	gree
The materials and					hv stude	ente											
The materials wer						JIII.											
Students indicated						nram											
Presenters were a															Ī		
If you had the opp	ortunit	y would	d you co	nduct th	is progra	am aga					Yes	[		No			
Would you recomi	mena t	nis pro	gram to	otner co	meague	·S ?				Ш	Yes	L		No			
In my opinion, the	thing s	student	s liked b	est abo	ut the m	aterial	s/prog	ram w	as:								
One thing I would	chang	e would	d be:														

WAT UT





#### **Teacher Evaluation Compilation**

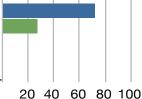


# Wattsmart Rocky Mountain program Program Evaluation Summary Report

wattsmart.c⊙m

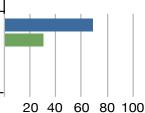
Materials were attractive and easy to use.

Response	Frequency	Percent	
Strongly agree	226	72.0%	
Agree	87	27.7%	
Disagree	0	0.0%	
Strongly disagree	0	0.0%	
No response	1	0.3%	



Materials and activities were well received by students.

Response	Frequency	Percent
Strongly agree	217	69.1%
Agree	96	30.6%
Disagree	1	0.3%
Strongly disagree	0	0.0%
No response	0	0.0%



Materials were clearly written and well organized.

Response	Frequency	Percent	
Strongly agree	246	78.3%	
Agree	67	21.3%	
Disagree	1	0.3%	
Strongly disagree	0	0.0%	
No response	0	0.0%	
			20 40 60 80 100

Students indicated that their parents supported the program.

Response	Frequency	Percent	
Strongly agree	118	37.6%	
Agree	180	57.3%	
Disagree	11	3.5%	
Strongly disagree	0	0.0%	
No response	5	1.6%	
		_	20 40 60 80 100

Presenters were able to keep students engaged and attentive.

Response	Frequency	Percent	
Strongly agree	218	69.4%	
Agree	91	29.0%	
Disagree	4	1.3%	
Strongly disagree	0	0.0%	
No response	1	0.3%	
	•	•	1
			20 40 60 80 100



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

wattsmart.com

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

Response	Frequency	Percent	
Yes	307	97.8%	
No	4	1.3%	
No response	3	1.0%	1 00 40 00 00 100
•			' 20 40 60 80 100

Would you recommend this program to other colleagues?

Response	Frequency	Percent	
Yes	306	97.5%	
No	4	1.3%	
No response	4	1.3%	
· · · · · · · · · · · · · · · · · · ·			° 20 40 60 80 100

Hands on activities with the LINGO and energy stick.

Being able to participate in the Lingo game and being able to volunteer to help out. They also loved the night lights.

-Lingo game with information from presentation.

-Doing the Home Energy Worksheet and the conversation with parents.

-Night lights

"Lingo" and the lights.

Activity of conductor and insulator.

All of the hand-on opportunities and the Lingo game.

All of the hands on activities and choral answers.

Being able to interact with the circuit demonstration.

Being active and participating.

Being involved in the presentation.

Being involved with the presentation!

Bingo! Favorite thing was the energy stick for making a complete circuit.

By far the activity the students liked most was creating the pathway with students and the "object" that lit up.

By far the human circuit! the Lingo and slide show! Is it possible to buy one of those circuits you had? I want one of those so bad! It is amazing!

Clear illustrations, videos, Lingo.

Completing circuit with the light!

Presenters were great with kids.

Topic of energy sources.

Lingo was fun.

Completing the circuits

Creating a circuit.

Demonstrations such as the one done with the energy stick.

During conferences the kids talked the most about electricity, making circuits with the circuit sticks, and conserving electricity.

Fast paced and engaging. Lingo.

Fun characters.

Getting to play the bingo game and participate in the activities.

Great information. The students loved the circuit activity and the video.

Hands on activites, filling out the survey, and getting their own night light.

Hands on activities and interactive presenters.

Hands on activities during the presentation.

Hands on activities.

Hands on experiments

Hands-on activities during presentation.

How interactive everything was.

I feel they were surprised at the ideas given to save money. They also loved the closed/open circuit demonstration and game.

I like how the program was developmentally appropriate and motivational for the students.

I love the electric circuit.

I love this program.

I love this program. The kids liked playing Lingo and the videos that were shown.

I loved that it helped them learn the science core and helped prepare them for SAGE.

I really enjoyed when the presenters brought up the students and created the circuit. I think having them do it really helped them understand the circuit.

I really liked the connection to different energy sources. I was able to use it as a curriculum tie-in to the physical and chemical changes. And my students enjoyed the experiments associated with the presentation.

I think the students enjoy what is presented and I like how it fits with our core.

I think they enjoyed the hands on activities and demonstrations.

Interactive activities, like the energy stick. It helped keep the students interest.

Interactive presentation and the night light reward.

It is such a good idea to have the Lingo activity so the students are actively engaged in listening to learn. They thought the night lights were awesome!

It taught what is required for us to teach.

It was entertaining. They love the night light.

It was great! The students loved being involved!

It was hands-on. Enjoyed the light and conductors.

It was interactive. They liked the Lingo game.

It was presented in a way that the students were actively engaged!

It was very informative, great presenters, fun activities, and the kids loved the night light.

Keeping the interest of the kids during the presentation. The Lingo game is great!

Keeping them engaged.

Learning about circuits was very exciting and engaging for them. I'm also excited to be able to refer back to this experience when we learn about circuits in our science later in the year.

Learning new things about conserving energy. They loved the game, it game them motivation and a purpose to focus.

Learning so much about energy usage and participating through the "Lingo" game and the human-energy path it goes through. They liked the Watt nightlight too. Good job!

Learning things that weren't so obvious. The charger information still pulls electricity even when not charging.

Learning ways to save money for their family.

Lingo

Lingo

Lingo

Lingo

Lingo

Lingo

Lingo and holding hands in the circle circuit.

Lingo and receiving a nightlight. They also liked the hands on visual of the conductor turning the light on and off by touching their fingers to one another.

Lingo and the human circuit.

Lingo cards. Conducting electricity through their bodies.

Lingo is always fun.

Lingo kept them listening. They liked getting the night lights.

Lingo, the energy stick, and the night lights.

Lingo, the human electricty circuit, and the night lights.

Loved it!

Making a circuit using the students.

Making the human circuit.

My students enjoy seeing facts and how it relates to real life. They like the statistics.

My students enjoyed learning about renewable energy.

My students liked the interactive activities the best. Having said that they seemed to receive everything well. Oh, and of course they enjoyed playing Lingo. The posters really add to the energy unit! Thank you!

My students seemed to enjoy the videos and the Lingo game.

Night lights.

Nightlight

Nightlights!

Or course the electricity rod. The presenters were great. And the detailed posters.

Participating in the demonstrations.

Passing the current through them when they were the conductor.

Playing lingo. This motivated them to pay attention to the information. Being involved in the presentation, i.e., demonstrating how electricity works and travels.

Playing the game "lingo" and the video.

Playing the game and earning the lightbulb nightlight.

Presenters were very engaging. Technology used was very good as well.

Receiving the night lights for doing the survey.

Relating electricity to the students every day lives.

Some of the kids were very interested in energy and excited about helping their families use it more wisely. They all loved the nightlights.

Student participation.

Students enjoyed the "Lingo" activity, as well as, making the human circuit.

Students enjoyed the presentation and information. They also enjoyed receiving the night light.

Students were very engaged. Presented in a great way!

Super program.

Taking part it in the Lingo activity!

Teaching about the different energy sources.

The "connection" to complete the circuit and make the thing flash.

The "flow" of electricity-conductor demonstration.

The activites demonstrating open and closed circuits.

The activities that allowed them to get up and get going.

The activities!

The circuit and electricity connections to the core.

The circuit ball!

The circuit circle.

The circuit they made with students and the light tube.

The closed circuit/open circuit with the energy stick activity was our favorite.

The closed/open circuit and Lingo game.

The conductor experiment.

The connection to our core objectives.

The correlation between the material and the state curriculum.

The current electricity demonstration-open hands/open circuit.

The cute powerpoint pictures and the Lingo game.

The demonstration of a circuit. That was very interseting.

The demonstration of a circuit. The was very incresting.

The demonstrations of current electricity and the generating electricity held the students attention.

The demonstrations using peers and the Lingo game.

The demonstrations using volunteers from the audience.

The demonstrations were fun and the power point was attractive.

The different forms of energy were interesting to them. They were able to refer back to the information later that day as we started a unit on energy in language arts.

The electric circuit and Lingo.

The electric stick. Everyone was engage during that activity. More activities.

The electricity and renewable energy.

The electricity circle and experiments.

The electricity circle and experiments.

The electricity stick & Lingo.

The energy stick and the bingo game.

The energy sticks!

The engaging and student involved demonstrations.

The experiments showing the use of a circuit.

The free gift

The funny videos and electrical circuit demonstration.

The game and the presentation kept them engaged. Visuals and having students help with presentation.

The game kept the students anicipation up.

The game that kept them involved, because it was such a large group the Lingo game helped a lot.

The group activity with holding hands and passing electricity along a broken or closed circuit.

The hands on activities

The hands on activities and they were able to relate it to what they were learning in class.

The hands on activities that allowed students to participate. Even having students discuss what the man in the video did was great.

The hands on activities that demonstrated what the instructors had been teaching.

The hands on activities, such as the human circuit.

The hands on activities. They also enjoyed Lingo.

The hands on activities. They also enjoyed the interactive nature of the presentation.

The hands on activity.

The hands on aspects of an open and closed circuit and the Lingo game.

The hands on experiments during the presentation. The nightlight.

The hands on parts. Using the complete circuit stick, coming up front to assist the presenters, and Lingo. They were thrilled with the nightlight.

The hands-on activities and Lingo were what I think my students liked the best. The powerpoint with videos was also great.

The hands-on activities where the students were able to get up and volunteer for a demonstration.

The hands-on activities, the videos, and Lingo.

The hands-on experiences.

The hands-on learning, especially the complete and incomplete circuit. It was designed for the age group thoughtfully.

The human circuit was their favorite.

The human circuit.

The incentive to receive a prize for a survey was effective.

The informative presentation. It was great and they were very involved.

The interaction kept their attention.

The interactive parts.

The interactive presentation kept their attention, and the Lingo board was great for reviewing key vocabulary.

The interactive/participatory nature of the presentation.

The kind ladies and the opportunity for something a bit different.

The lesson was engaging and fun. The presenters were excellent.

The Lingo card review activity and the opportunity to see and experience the circuit.

The Lingo card. The energy stick and night light. Thanks!

The Lingo cards helped the kids stay focused.

The Lingo game

The Lingo game and creating the human circuit.

The Lingo game and the demonstration about how to make light in your house.

The Lingo game and the night lights!

The Lingo game and the video.

The lingo game! They also loved the night lights and the time to participate.

The Lingo game.

The Lingo game. Making the class circle around and produce energy to the light bulb (closed circuit).

The material was engaging. They loved the demonstrations.

The night light & the energy ticket lesson.

The night light!

The night light.

The night light.

The night lights and having electricity passing through each other.

The night lights and the energy stick.

The night lights they got.

The night lights were a huge hit. They liked learning about easy ways kids their age could save energy. Thank you very much for providing this service!

The night lights.

The nightlight!

The open and closed circuit activity.

The opportunity to experience a different approach. It's always nice to have a change.

The presentation and free light.

The presentation as a whole.

The presentation video.

The presentation was clear, straight forward and well done. They liked the interactive parts especially.

The presentation was liked the best. They liked the videos and the circle of students showing the flow of energy. They thought it was "cool" to get the night lights.

The presentation was very engaging. They were excited about the night lights too.

The presentation was very engaging. The students like participating.

The presentation.

The presenters knew how to present to 5th graders. However, smaller groups (we had three classes at once) may be more effective.

The presenters were great with the kids.

The presenters were great! Kept the students involved and interested. The hands on energy stick was great!

The presenters were upbeat and engaging.

The questions asked to them and how well they were able to connect everything to their lives.

The reward after bringing back the survey.

The student demonstration about conductors and insulators.

The students are always enthused with a change and the program was entertaining and educational. They loved the night light.

The students are interested in the information about natural resources! They love learning about how we harness energy in so many ways. The slides are engaging, & the gameboard kept them interested as well.

The students enjoy the Lingo game. It keeps them involved! Great materials! They love the night light.

The students enjoyed being able to go home with their newly learned knowledge and talk to their families about it.

The students enjoyed being able to participate hands on, during the program. They, also, loved the night lights.

The students enjoyed learning about how energy helps them, and ways to save it!

The students enjoyed participating in creating a circuit and the Lingo game. They also liked getting the night light!

The students enjoyed the Bingo game, the light-up stick, and the night light they received.

The students enjoyed the energy of the presentation. The "new" discovery of how things work kept their attention. The students enjoyed using the energy stick the most. I think that activity will make the entire presentation memorable for them.

The students enjoyed using the energy stick the most. I think that activity will make the entire presentation memorable for them.

The students liked playing Bingo. Also, the students liked coming up to help with different experiments.

The students liked seeing how electricity flowed without hurting anyone.

The students liked when they touched one another and the light came on. They also enjoyed playing Lingo.

The students loved getting the night lights. They enjoyed the presentations.

The students loved the night lights! Great incentive for them to talk to their parents and return their worksheets. Wonderful program, thank you!

The students really enjoyed the bingo card activity and humorous presentation with the light bulb head.

The students really loved the game and the positive interaction with the presenters!

The use of volunteers and props!

The variety of activities and media. The quest presenters were so fabulous: engaging, welcoming, personable, etc. Best ever!

The videos and Lingo game. Also, the demonstrations.

The wand that lights up when touched, the lingo game, videos and powerpoint, & the energetic and enthusiastic instructors. They also liked the night light.

Their participation in the Lingo type activity during the presentation.

They enjoyed the electrical circuit balls!

They enjoyed the interaction with the presenters. They also enjoyed the hands on demonstrations.

They enjoyed the interaction with the presenters. They also enjoyed the hands on demonstrations.

They enjoyed the student participation components.

They hands-on experiments. My students love to get up and participate!

They liked being a human conductor of electricity.

They liked being engaged and using the Lingo cards. Also, learning specific things they could do as students to save energy. The night lights were very motivating.

They liked earning a night light and being taught by someone new.

They liked getting the lights.

They liked how their parents were supportive of the program.

They liked learning about electricity and the video clips.

They liked learning ways they could take action to share electricity.

They liked participating by coming up to help. They also liked playing the Lingo game. Good job!

They liked participating.

They liked playing Lingo and being chosen to go up front and act out and role play. Lingo was loved!

They liked playing Lingo and they loved being personally involved in showing how electricity is made and creating a human circuit. Our presenters were fantastic!

They liked the conductor experiment and when the students held hands and the tube lit up.

They liked the hands on activities and they loved Lingo.

They liked the night light.

They liked the Nightlight.

They liked the nightlight.

They liked the nightlight.

They liked the videos and any kind of interaction.

They liked the videos and Lingo game-very engaging.

They love doing "Lingo"

They love getting the WattSmart night light.

They love the light stick and making a human circuit.

They loved all of the experiments. The hands-on chemical lad was a favorite also.

They loved being able to participate in the demonstrations.

They loved being in a circle and making the energy stick light up & buzz.

They loved seeing the light turn on when the students made a circle.

They loved that the presentation was hands on! It sparked thoughts on the topic that normally wouldn't be there.

They loved the "conductors" activity and how their bodies were the actual circuit. Loved it!

They loved the activities

They loved the Bingo game and the stick.

They loved the circuit demonstration with the energy stick and testing out conductors and insulators.

They loved the electical circuit activity.

They loved the energy tube and creating human circuits. They also enjoyed the Lingo game played throughout the presentation.

They loved the hands on activities! Especially the circuit and Lingo game.

They loved the hands on portions and the night lights.

They loved the interactive activities.

They loved the interactive Bingo

They loved the Lingo, the power point was engaging, and the activity booklet was well thought. I liked the energy sources and how they were explained to the students.

They loved the night lights and demonstrations!

They loved the night lights. They also loved the light that lit up when the circuit was complete during the presentation.

They loved the nightlight from returning the survey.

They loved the posters and looking at all the different power stuff. The information on electricity and currents went well with our science unit.

They really enjoyed making the complete circuit.

They really enjoyed the demonstration with the energy stick.

They really enjoyed the LINGO game! They also enjoyed the things they would get called up to participate in.

They really like it when they get to participate in the presentation. They also like the Bingo game.

They really liked the Bingo game.

They really liked the program and the presenters. The nightlights were also a great hit.

They really liked the program and the presenters. The nightlights were also a great hit.

They relate to the students. They loved the circuit.

They seemed to enjoy learning new things and quizzing themselves with Lingo cards.

They were excited to get their night lights after turning in their form.

They were kept actively moving and engaged.

This year, they are excited for the nightlights.

Tremendous interactive lesson and discussion. Students were engaged. Presenters were excited and showed an interest in these young people.

Understanding electricity.

Understanding the electricity curriculum.

Visuals and Lingo.

Was seeing how everything works. It was hands on.

Watching demonstration and playing bingo.

We do this every year and love it!

Your BINGO game is wonderful-makes them think, yet it's fun.

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

A lot of kids had a chance to help which was a positive. But many kids didn't even have a chance to stand. And hour is a long time to sit on the floor. Even in chairs it's a long time. Kids are use to simple brain breaks. Teachers could even do this.

Activities that are more interactive.

Add more hands on activities so students better understand circuit electricity.

Add more to the presentation from the UTAH 5th grade core.

Better whole group management throughout the hands-on experiences.

Bingo game would be nice to have a prize for the winner.

Bring more energy sticks so all kids could be in a circle and try it. (More small circles).

Come later in the school year to provide a review on electricity.

Come teach when teachers are doing the electricity sections.

Do one class at a time, it's more personal.

Emphasize more why we should be more energy efficient, and move more to renewable energy sources.

Everything was terrific. Thanks for coming!

Excellent job!

Have a self-evaluation of power usage by students. Bring it home to them.

I can't think of anything.

I thought the presenters did an awesome job. The only recommendation I would have is working on smoother transitions between Lingo and the activity circuit.

I would not change anything.

In that particular location (school lunch room) it would have been nice to have a microphone.

It was all really good! We loved the presentation.

It would be nice if the Home Energy Worksheet were a little more tied to the presentation. I would like to see more of the excitement of the presentation carried over to the completion of the worksheets.

It would be nice to have the presenters split up and speak to smaller groups of students.

Kids would buy into Lingo more if the prizes were tangible, like one of the nightlights, small pen and keychain etc. Majority of our students are in apartments or the homeless shelter. Asking them to remind parents to recycle old refrigerators is not realistic for our population.

Make the survey more "kid friendly."

Maybe have a chart with the new vocabulary words used in the presentation.

More chances for all the students to participate with the cool gadgets. I know that may not be possible.

More engaging activities.

More hands on activities.

More information for students to help with the home survey.

None

Nothing really. Thought it was well run and well received.

Nothing, they did a great job! Thanks!

Nothing.

Nothing.

Nothing. Students were engaged, attentive, and fanastic!

Nothing. Students were engaged, attentive, and fanastic!

Our presentations were awesome!

Provide small prizes for the bingo game.

Thank you!

The bingo game was a little distractive.

The Lingo game would be nicer if there was a winner.

The presentation was supposed to be 1 hour, but it ended up being about 35 minutes. Maybe more movement.

The promise of something when they participate because they only got the "something" if they returned the paper.

They are always disappointed that the Lingo game has no reward. Not really needed, but that is all I could think of.

Way too long! Some activities were too young, i.e. repeat, "flow, flow flow" etc.

You always do a great job!

## Home Energy Worksheet (English)

Tea	cher ID					Be <b>watt</b> smart Begin at h@me
		Home En	ergy I	VVoi	rksheet	
Stu	dent First Name		1	2. Wa	1	vasher and clothes washer.
	ating				Currently do	Will do
1.	Install and use a programma	able thermostat			Neither	
••	Currently do	Will do	L	_ighti	ng	
	Neither		1	3. Rep	olace incandescent bulbs	s with CFL or LED bulbs.
2.	Caulk windows and weather	r strip outside doors.			Have done	Will do
	Have done	Will do			Neither	
	Neither		1	4. Tur	n lights off when not in u	ise.
3.	Inspect attic insulation and a	add insulation if needed.			Currently do	Will do
	Have done	Will do			Neither	
	Neither		_	Dofria	oration	
4.	Keep furnace air filters clear			_	eration	
	Currently do	Will do	1	5. Rep	olace old, inefficient refri <sub>:</sub> AR <sup>®</sup> model.	gerator with an ENERGY
	Neither				Have done	Will do
Со	oling				Neither	
5.	Replace existing air condition high-efficiency unit.	oning unit with a	4		I	
	Have done	Will do	1	6. Unp	olug and/or recycle old fr Have done	Will do
	Neither				Neither	will do
6.	Close blinds when windows	are exposed to the sun.			I	
	Currently do	Will do	1		intain refrigerator and fre ils twice yearly.	eezer coils and check door
	Neither				Currently do	Will do
7.	Use a fan instead of air con-	ditioning.			Neither	
	Currently do	Will do	_	-14		
	Neither			=iectr	onics	
8.	Participate in Rocky Mounta	in Power's Cool Keeper	1	8. Tur	1	me consoles when not in use.
	program.  Currently do	Will do			Currently do	Will do
	Neither	will do			Neither	
\A/-			C	Cooki	ng	
_	ter heating	t t- 400 d 5	1	9 Use	e a microwaye oven toa	ster oven or crock pot instead
9.	Set the water heater temper  Have done	Will do			conventional oven.	—
	Neither	will do			Currently do	Will do
10	Install a high-efficiency show	werhead			Neither	
10.	Have done	Will do			Get paid for be	i <b>ng w<i>att</i></b> smart
	Neither		0	)O \/:-:	<u>-</u>	•
11.	Take 5 minute showers.		2		ergy-saving tips and reba	r at wattsmart.com for more ates.
	Currently do	Will do			Have done	Will do
	Neither				Neither	
		• • • •				WAT UT
			•			AI.
	Natior Enerc				ROCKY MOUNTAIN POWER	V
	Found	látion.		•	Let's turn the answers or	n.
	cultivating en	nergy literacy				



### Home Energy Worksheet (Spanish)

Profesor(a) Nombre	

## Ser **watt**smart © Empieza en casa

# Verificación de la Energia Domestica

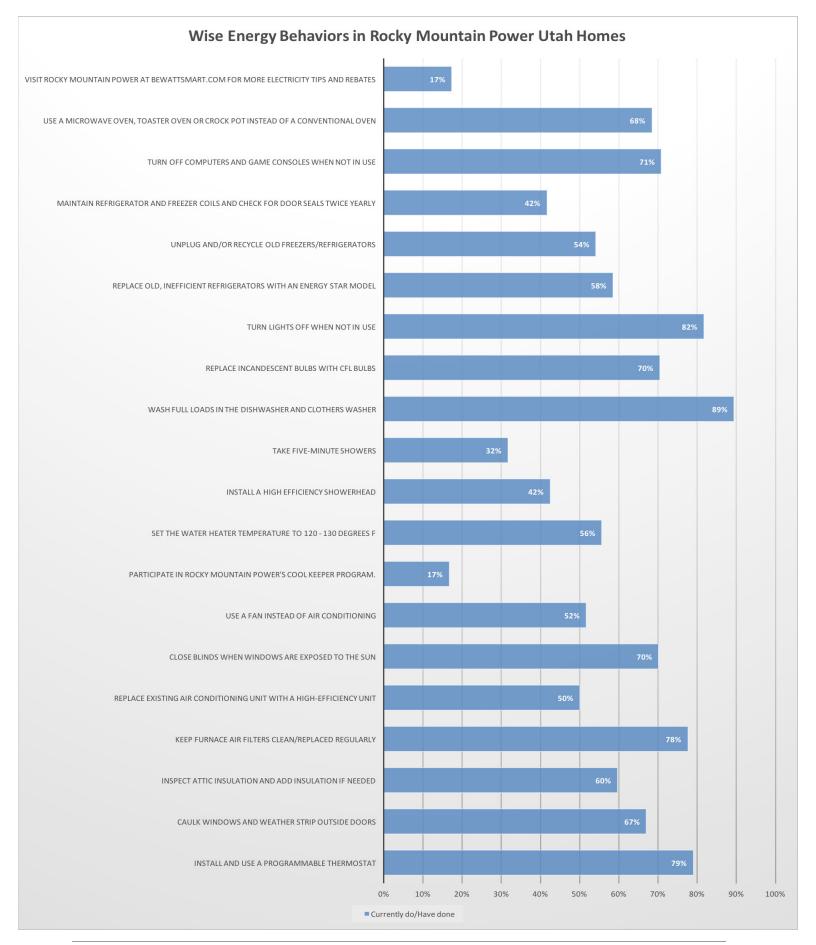
Del Es	studiante			12.	Lavar cargas llen ropa.	as en los lavaplat	os y las lavadoras de
					□ Lo hago	□ Lo haré	□ Ninguno
Calefa	acción			llumin	ación		
1.	Instalar y usar ur	· ·	=	13.	Reemplazar los fo	ocos incandescen	tes con focos CFL o LED
	□ Lo hago	□ Lo haré	□ Ninguno		☐ Lo he hecho	□ Lo haré	□ Ninguno
2.	Calafatear ventar las puertas.	nas e instalar bur	letes en el exterior de	14.	Apagar las luces		
	☐ Lo he hecho	□ Lo haré	□ Ninguno		□ Lo hago	□ Lo haré	□ Ninguno
3.	Inspeccionar el a aislamiento si es		ico y agregar	_	eración Reemplazar refri	igerador antiguo	e ineficiente con
	□ Lo he hecho	□ Lo haré	□ Ninguno	13.	modelo de ENEI	-	e menciente con
4	Mantonau las filt	maa da aima da la	· ·		$\square$ Lo he hecho	□ Lo haré	□ Ninguno
т.	reemplezarlos re		calefacción limpios/	16.	Desenchufar y/o antiguos.	reciclar congela	dores/refrigeradores
	J	□ LO Hare	□ INIIIguiio		☐ Lo he hecho	□ Lo haré	□ Ninguno
		nidad de aire aco	ndicionado existente	17.			dor y del congelador y rtas de dos veces al año
2. Calentace 9. Pr 10. In 11. To	por una unidad c				□ Lo hago	□ Lo haré	□ Ninguno
	☐ Lo he hecho	□ Lo haré	□ Ninguno	D:	J		
6.		nas cuando las v	entanas estén expuestas	•	tiuos Electrónic		. 4
	al sol. □ Lo hago	□Lo haré	□ Ninguno	10.	estén en uso.	doras y consolas	de juegos cuando no
7	Usar un ventilado	or en lugar del ai	re acondicionado		□ Lo hago	□ Lo haré	□ Ninguno
•	□Lo hago	□ Lo haré	□ Ninguno	Cocin	ar		
8.		-	Keeper" de Rocky	19.	Usar el horno m cocedor lento el		orno eléctrico o un o convencional.
	□ Lo hago	□ Lo haré	□ Ninguno		□ Lo hago	□ Lo haré	□ Ninguno
Calen	tadores de agua			Reciba	a paga siendo <i>wo</i>	attsmart	
	Programar el cal	entador de agua	a 120 grados F.	20.			wattsmart.com para
	☐ Lo he hecho	□ Lo haré	□Ninguno		obtener mas cor  ☐ Lo he hecho	nsejos y rebajas o □ Lo haré	de ahorro de energía.
10.	Instalar una cabe	zal de ducha de a	alta eficiencia.		_ 20	_ 20 0	
	☐ Lo he hecho	□ Lo haré	□ Ninguno				
11.	Tomar duchas de	5 minutos.					
	□ Lo hago	□ Lo haré	□ Ninguno				





Hagamos brillar las soluciones.

#### Wise Energy Behaviors in Rocky Mountain Power Utah Homes

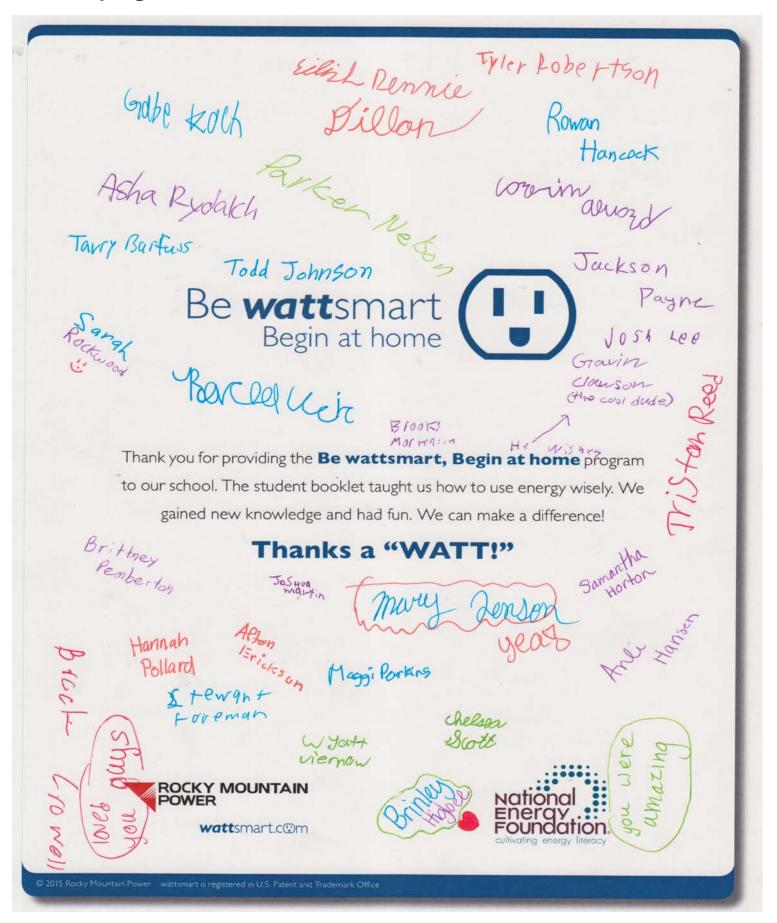


## Home Energy Worksheet Summary - Rocky Mountain Power

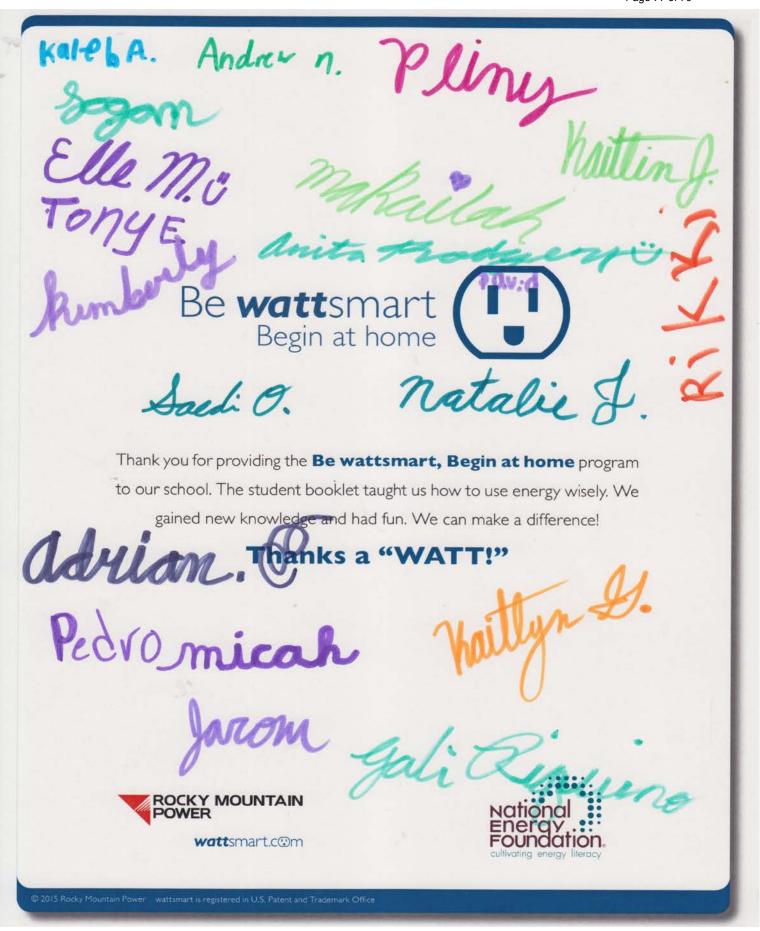
# WattSmart Education Program Home Energy Worksheet Summary - Rocky Mountain Power

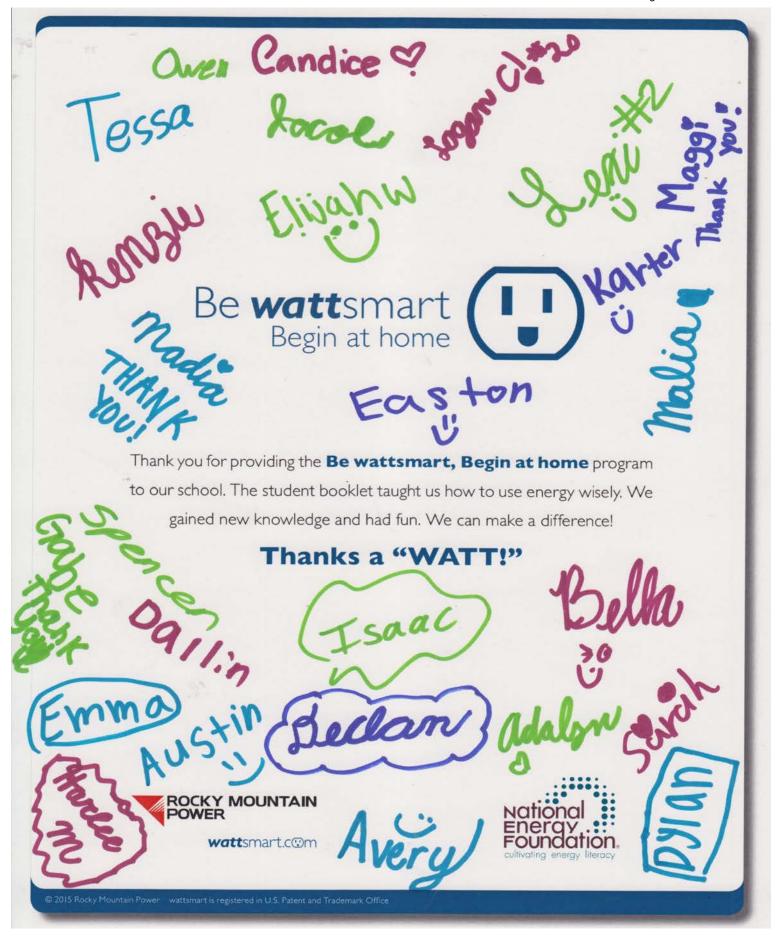
	Currently do		
Energy Efficient Activity	/Have done	Will do	Neither
Install and use a programmable thermostat	79%	9%	12%
Caulk windows and weather strip outside doors	67%	17%	16%
Inspect attic insulation and add insulation if needed	60%	17%	23%
Keep furnace air filters clean/replaced regularly	78%	14%	9%
Replace existing air conditioning unit with a high-efficiency unit	50%	17%	33%
Close blinds when windows are exposed to the sun	70%	10%	20%
Use a fan instead of air conditioning	52%	15%	33%
Participate in Rocky Mountain Power's Cool Keeper program.	17%	22%	61%
Set the water heater temperature to 120 - 130 degrees F	56%	18%	27%
Install a high efficiency showerhead	42%	18%	40%
Take five-minute showers	32%	25%	43%
Wash full loads in the dishwasher and clothers washer	89%	5%	6%
Replace incandescent bulbs with CFL bulbs	70%	18%	12%
Turn lights off when not in use	82%	14%	4%
Replace old, inefficient refrigerators with an ENERGY STAR model	58%	17%	25%
Unplug and/or recycle old freezers/refrigerators	54%	17%	29%
Maintain refrigerator and freezer coils and check for door seals twice yearly	42%	37%	21%
Turn off computers and game consoles when not in use	71%	17%	12%
Use a microwave oven, toaster oven or crock pot instead of a conventional oven	68%	13%	19%
Visit Rocky Mountain Power at bewattsmart.com for more electricity tips and rebates	17%	55%	28%

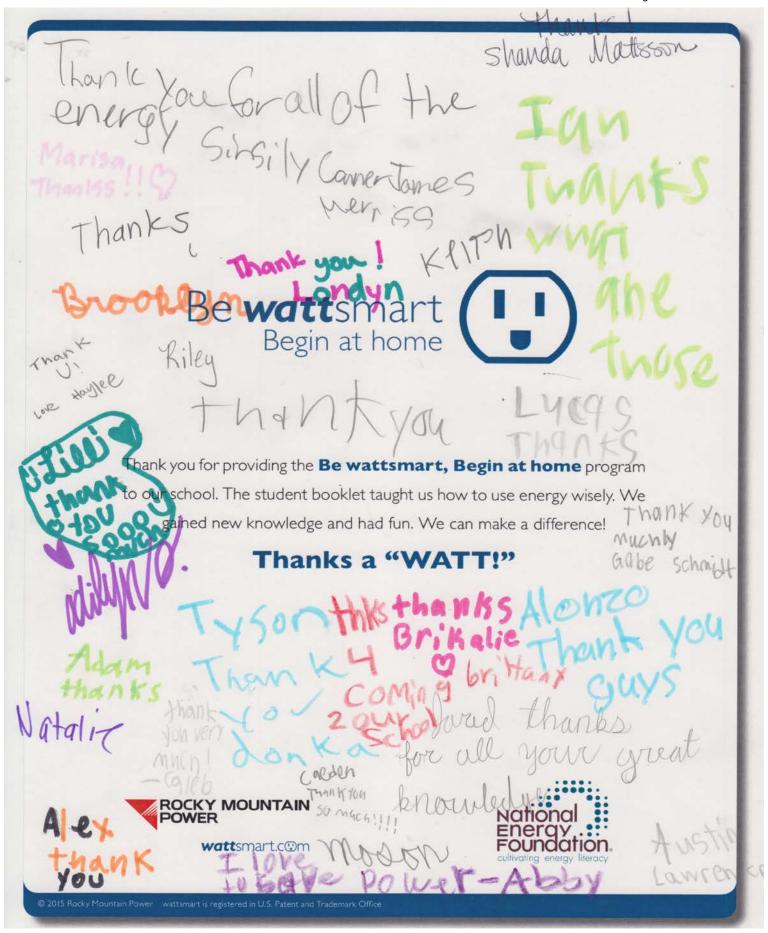
### Sampling of Thanks a "WATT" Cards











# Exhibit E

Creative and New Stories



New creative developed in 2015

#### TV

- Wattsmart, Utah incentives
- Wattsmart, Utah neighbors
- Wattsmart, Utah shave ice
- Wattsmart, Utah powers down
- Wattsmart, Utah summer rates
- See ya later, refrigerator

#### Radio

- Wattsmart, Utah ponies/incentives
- Wattsmart, Utah summer/peak demand
- Wattsmart, Utah taking it easy
- Wattsmart, Utah new neighbors

#### **Print:**

- Act wattsmart video contest print ad (PDF)
- Wattsmart, Utah tiered rates
- Wattsmart, Utah evaporative cooling (New!)
- Wattsmart, Utah peak demand/puppy

#### Outdoor/Transit

- <u>Trax Coupler</u>
- Queens
- Double-vent Trax Coupler
- 78 degrees
- Cooling/fan
- Peak demand

#### Digital/online ads

- See ya later, refrigerator
- See ya later, refrigerator KSL wrap
- "Being a wattsmart Business does wonders for your bottom line"
- DSM ads for GSN
- Wattsmart, Utah Peak demand
- Wattsmart, Utah evaporative cooling
- Wattsmart, Utah 78 degrees

#### Facebook (paid ads)

- Wattsmart, Utah 78 degrees
- Wattsmart, Utah evaporative cooling #1
- Wattsmart, Utah evaporative cooling #2

#### **Business print**

- wattsmart Businesses
- Thank you wattsmart businesses
- wattsmart Business
- Moab Valley Inn
- Moab Valley Inn
- Varian Medical
- Utah Governor's Energy Summit ad
- Iron County School District
- Irrigation and Dairy incentives

#### **Business radio**

- Dream Business is in Utah, not Germany
- Dream Business is in Utah, not Paris
- Dream Business is in Utah, not NYC

#### **Business digital**

- Bottom line animated
- Bottom line static

#### wattsmart Business email blasts

- Commercial/retail
- Restaurant/lodging
- Convenience Store/Grocery
- HVAC
- Lighting LED instant incentives
- Lighting Controls

#### **Business bill insert**

• HVAC

#### **Direct mail**

• wattsmart Starter Kit

#### Collateral

- Home Energy Savings program brochure
- Home Energy Savings program incentive list
- Home Energy Savings retail POP
- Home Energy Report handout
- wattsmart Business Overview
- wattsmart Business Case Study: Evaporative Cooling
- wattsmart Small Business Lighting handout
- wattsmart Business LED instant incentives handout
- wattsmart Business brochure updated
- wattsmart Business brochure: Small Commercial & Retail (trifold print)
- wattsmart Business brochure: Small Commercial & Retail (web version)
- wattsmart Business brochure: Small Commercial & Retail (co-branded copy)
- wattsmart Business Energy handout
- wattsmart Business case study: Larry H. Miller Group (updated)
- wattsmart Business Cedar City targeted town event flyer

#### **Residential customer newsletters**

- January Voices <u>newsletter</u>
- March March Voices newsletter
- April Voices newsletter
- July Voices newsletter (PDF)
- September Voices <u>newsletter (PDF)</u>

#### wattsup

- wattsup insert (PDF) (May)
- wattsup insert (PDF) (October)

#### **Bill inserts**

- February Spring Home & Garden Festival
- April wattsmart LEDs and free kit insert
- June: <u>HES cooling incentives insert</u>, See ya later, refrigerator <u>insert (PDF)</u>
- August See ya later, refrigerator program insert (PDF)
- wattsmart Business HVAC insert (PDF)

#### Outer envelope

- January be wattsmart to jump start 2015
- July <u>outbound bill envelope (PDF)</u>

#### **Business customer newsletters**

- Energy Connections for midsize business customers (4/15)
- Energy Connections for midsize business customers (6/15)
- Energy Connections for midsize business customers (9/15)
- Energy Insights for large accounts and communities (Winter)
- Energy Insights for large accounts and communities (Spring)
- Energy Insights for large accounts and communities (Summer)
- Energy Insights for large accounts and communities (Fall)

#### Earned Media – 2015

Layton, UT (Davis Co.) Hilliop Times (cir W 17,500)

JAN 1 5 2015

# Hill AFB Energy Champion

By DAVE ABBOTT,

75th Civil Engineer Squ utility manager 5130

Hill recently honored an engineer for his energy saving ef-forts, an Air Force priority. Trent Tholen, an electrical engineer and senior project manager as-signed to the 309th Maintenance Support Squadron, took positive, specific actions to ensure improved working conditions and energy savings could be achieved simultaneously.

While working directly with process and facility engineering teams within the Ogden Air Logistics Complex, Tholen distinguished himself by identified and corrected lighting inefficiencies for C-130 tests stands in Building

The lighting retrofit involved replacing 83 (175-watt) Pulse

Start Metal Halide fixtures with 60 (78-watt) and two (39-watt) Light Emitting Diode, or LED,

The upgrade was needed because the existing lighting was inadequate and frequent painting rework was required due to shadows and poor lighting levels.

It was determined that 4-inch

linear LED lighting fixtures would be used for improved lu-men maintenance, lighting color rendering, lighting uniformity and reduced maintenance.

The result: The lighting qual-ity has greatly improved and painting rework has lessened, while reducing lighting-fixture

energy and maintenance costs. Tholen's thinking was instrumental in achieving annual sav-ings of 54,851 kWh and annual

utility cost savings of \$4,569. In addition, working with the base energy manager and taking advantage of Rocky Mountain Power's Watt-Smart Business Rebate Program, Hill received more than \$11,000 in incentive

These are only a few of
Tholen's energy efficiency accomplishments within the depot maintenance workload - and just one example of Team Hill at its best, Hill AFB utility officials said

For these and other efforts, Tholen was recognized as the fis-cal 2014 Hill AFB Energy Champion for his contributions.
Officials said he is a shining

example of excellent energy and environmental stewardship for the Air Force and the Depart-



Alex R. Lloyd/U.S. Air Force

Col. Ron Jolly, 75th Air Base Wing commander, recognizes Trent Tholen, 309th Maintenance Support Squadron electrical engineer, for his energy and environmental stewardship efforts in 2014.

Tremonton, UT (Box Elder Co.) Leader & Garland Times (Cir. W. 2,600)

# APR 0 8 2015 Allen's P. C. B. Lie 1936 Wattsmart starter kits available

A few simple changes can stretch your energy dollar and lower your monthly bills. Rocky Mountain Power's new wattsmart Starter Kit is the perfect place to begin. The kit is free to Rocky Mountain Power customers and includes a combination of ENER-

GY STAR® and WaterSense® products that deliver immediate savings.

The contents of each watermark

The contents of each wattsmart Starter Kit are based on the custom-cr's water heating type. To begin, each kit contains four compact fluorescent light bulbs. For customers who have

how many full bathrooms are in their home.

The wattsmart Starter Kit is an excellent entry.

The wattsmart Starter Kit is an excellent entry point to home energy savings, showing that something as simple as changing a bulb can truly make a difference. Combined, these upgrades can save approximately \$50 or more every year.

ENERGY STAR rated CFLs use 75 percent less energy than traditional incandescent bulbs and last as much as 10 times longer. WaterSense showerheads save energy and reduce the

electric water heating, kits will include average family's water use by as muc one or more high-performance show- as 2,900 gettons per year, white eacerheads and faucet acrators based on how many full bathrooms are in their gallons.

For customers looking to increase the savings even more, the kit can be upgraded to include additional proxucts like super-efficient LED bulk that use one-tenth the energy and callast as long as 25 years. Also available in the upgraded kit is a hand-hel showerhead.

For more information and to orde a free wattsmart Starter Kit, vis wattsmart.com/starter, and have you Rocky Mountain Power account nurr ber handy to include on the form.



Ogden, UT (Weber Co.) Standard-Examiner (Cir. D. 50,546) (Cir. S. 52,061)

APR 1 2 2015

Aller's P. C. B. Fr. 1888

# Trash old fridges, fight hunger

SALT LAKE CITY -How can an old refrigerator help fight hunger in Utah? Through Rocky Mountain Power's See Ya Later Refrigerator program, customers can easily get rid of their energyguzzling appliance for free and donate the \$30 incentive they receive for doing so to Utah Food Bank. It's a new feature added to the company's long-standing refrigerator recycling program.

"This new partnership with Utah Food Bank, coupled with recycling old refrigerators, benefits both customers and Utah Food Bank," said Gary Hoogeveen, Rocky Mountain Power vice president and chief commercial officer. "Today's modern refrigerators use about one-third the electricity that such appliances used 20 years ago."

Giving over the \$30 incentive check can help Utah Food Bank provide more than 210 meals to 1 those in need, the company said.

This year, the See Ya Lai'er Refrigerator progra m has a goal to recycle more than 15,000 appliances, saving an estimated 15 million kilowatt hours a year, equivalent to powering about 1,300 typical Utah homes for a year. So far, more than 150 customers have donated their incentive checks totaling more than \$4,500. Rocky Mountain Power and Utah Food Bank hope the campaign will generate at least \$15,000 to \$20,000 to help fight hunger.

To schedule a pickup, Rocky Mountain Power customers can call 1-866-899-5539 or visit www.wattsmart.com. Appliances must be in working order and empty when the crew arrives to pick them up for recycling.

Units picked up through the program are transported to an appliance recycling facility operated by JACO Environmental. JACO safely removes hazardous materials from the old energy-guzzlers, reclaiming 95 percent of the materials in the appliances for reuse in manufacturing new products.

— Standard-Examiner staff

Richfield, UT (Sevier Co.) Reaper (Cir. W. 6,100)

APR 1 5 2015

Aller LCE BE IN

# Filling food pantries

RMP and the Utah Food Bank encourage customers to donate energy efficiency incentives to help stop hunger

How can an old refrigerator help fight hunger in Utah?

Through Rocky Mountain Power's See Ya Later Refrigerator program, customers can get rid of their energy guzzling appliance for free, and donate the \$30 incentive they receive for doing so to Utah Food Bank. It's a new feature added to the company's long-standing refrigerator recycling program.

"This new partnership with Utah Food Bank, coupled with recycling old refrigerators, benefits both customers and Utah Food Bank," said Gary Hoogeveen, RMP vice president and chief commercial officer.

"Today's modern refrigerators use about one-third the electricity that such appliances used 20 years ago. In today's world it's important to use electricity as efficiently as possible, and our See Ya Later Refrigerator program is an easy way to help customers do exactly that."

Jim Yorgason, Utah Food Bank president and CEO, said the \$30 incentive check can help the food bank provide more than 210 meals to those in need. Yorgason said an estimated 444,000 Utahns go hungry each day with one in five Utah children at risk of missing a meal daily.

"Rocky Mountain Power customers who choose to use their \$30 incentive in this way show a good deal of compassion to their neighbors in need in the community," Yorgason said.

This year, the incentive program has a goal to recycle more than 15,000 appliances, generating at least \$15,000 to \$20,000 to help fight hunger, and saving an estimated 15 million kilowatt hours — equivalent to powering approximately 1,300 typical Utah homes for a year. So far, some 150 customers have donated their incentive checks totaling more than \$4,500.

The appliance recycling program offers customers the \$30 incentive along with free removal of old refrigerators and freezers.

Research has shown that when new

refrigerators are purchased for the kitchen, the old appliances are placed in the garage or basement. While the extra refrigerator space was used a few times a year, the appliance continues to consume electricity every day.

In addition, recycling of one outdated refrigerator has the environmental impact of removing two cars from the road for a year and repurposes more than 188 pounds of materials such as foam, glass and metal for future use.

Units picked up through the program are transported to an appliance recycling facility operated by JACO Environmental, which removes hazardous materials from the old energy guzzlers, reclaiming 95 percent of the materials in the appliances for reuse in manufacturing new products.

Appliances must be in working order and empty when the crew arrives to pick them up for recycling.

For more information, call (866)

#### **News releases**

https://www.rockymountainpower.net/about/nr/nr2015/tutah-energy-plan.html
https://www.rockymountainpower.net/about/nr/nr2015/LDS-Church-honored.html
https://www.rockymountainpower.net/about/nr/nr2015/hill-air-force-base.html
https://www.rockymountainpower.net/about/nr/nr2015/iron-county-school-dist.html
https://www.rockymountainpower.net/about/nr/nr2015/iron-county-school-dist.html
https://www.rockymountainpower.net/about/nr/nr2015/irp-energy-plan.html
https://www.rockymountainpower.net/about/nr/nr2015/video-contest-winners.html
https://www.rockymountainpower.net/about/nr/nr2015/video-contest-advice.html
https://www.rockymountainpower.net/about/nr/nr2015/video-contest-advice.html
https://www.rockymountainpower.net/about/nr/nr2015/homeshow.html
https://www.rockymountainpower.net/about/nr/nr2015/videocontest.html
https://www.rockymountainpower.net/about/nr/nr2015/videocontest.html

# Exhibit F

2015 Act wattsmart Video Contest Recap

# RIESTER

# **Promotional Activities**

- March: Launch
  - Public Relations
  - Creative Press Kit 2 TV interviews booked day of delivery
  - TV and radio interviews
  - Home Show Launch
  - Movie Themed Photo Booth: 400 photos taken
  - Image emailed with info and branding to participants
  - Voices Newsletter & eBlast









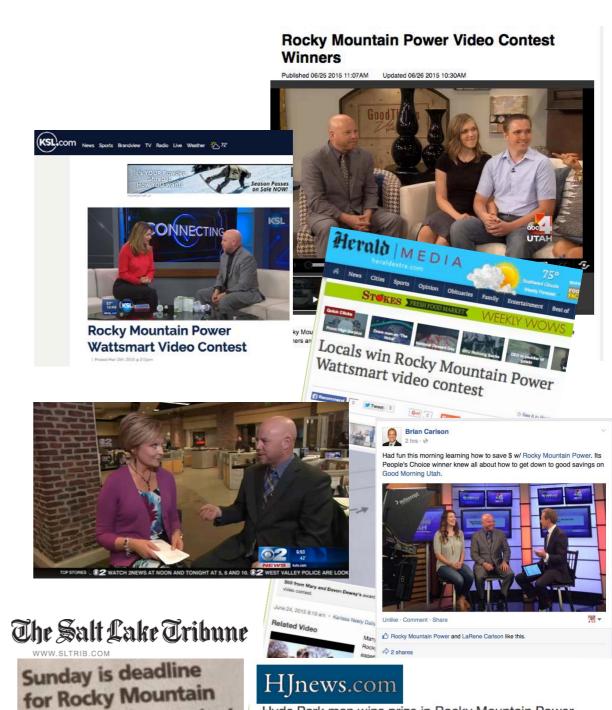
- March-June: Social Media
- April-May: Grassroots Awareness
  - Along Wasatch Front & Back more than 200 posters placed in coffee shops, community centers and on other public boards
- April: Midway Reminder Press Release
  - Advice from Past Winners
  - Newspaper pick up Provo Herald
- May: eBlast
  - Sent to 331,926 Utah residential customers
- June: Winners Announced
  - Press release announcement
  - Targeted three major markets SLC,
     Provo/Orem and Logan
  - TV, Radio and Print interviews



# RIESTER

### **Earned Media Results**

- •Overall: More than 13 million media impressions
- Launch Coverage: All 4 market TV stations, 3 radio interviews
- •Winner Announcement: 5 TV interviews, 5 radio interviews
- •Print Coverage:
  - All major newspapers Salt Lake Tribune (2), Deseret News, Provo Daily Herald, Logan Herald Journal
  - At least 2 Newsletters
- Positive coverage utilizing wattsmart messages/tips in all earned media opportunities
- Utilized winners and RMP spokesperson in coverage



video contest

Hyde Park man wins prize in Rocky Mountain Power

Power's video contest



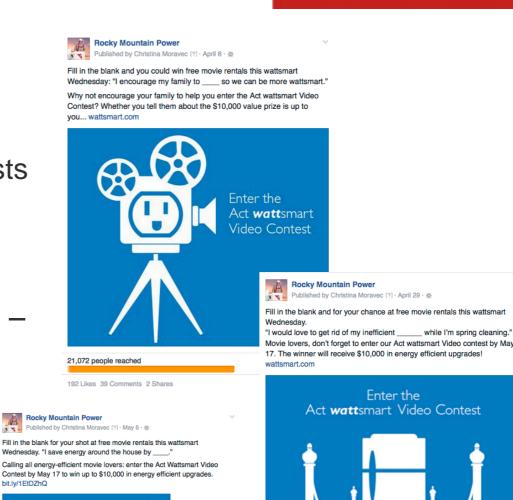
# **Social Media Awareness**

# **Facebook**

- Editorial calendar composed of organic and promoted posts
- •7 promoted posts with more than 194K impressions with more than 3,600 click throughs
- •Added nearly 275 new fans during the time period (March June 17)

### **Twitter**

- Promoted posts new to the platform
- More than 589,000 impressions and 914 clicks



27,200 people reached

### Campaign Summary

Site	Impressions	Clicks	Avg. CTR (%)	Est. CPC	Est. Spend
Facebook	194,638	3,685	1.89	\$0.43	\$1,610.21
Site	Impressions 589 482	Clicks 914	Avg. CTR (%)	Est. CPC \$2.74	Est. Spend \$2,500,00

183 Likes 67 Comments 2 Shares

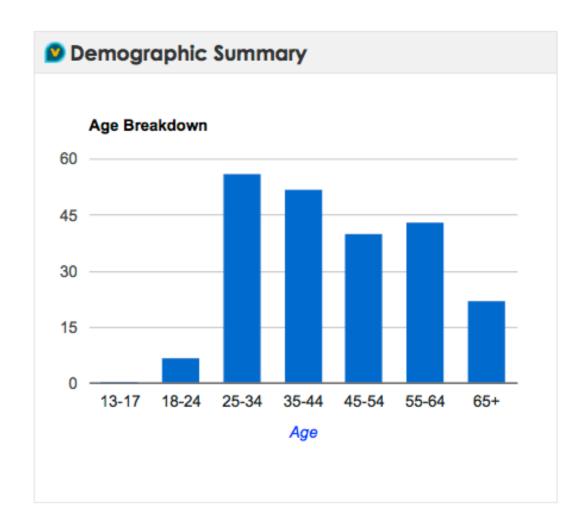


# **Votigo Platform Participant Engagement**

- May 6-17 majority of videos uploaded
- 220 Registrations
- 53 Videos Uploaded
- 5,232 Votes

# Participant Demographics

191 Registrations Age 25-64 y/o



Campaig	n Engagement by Channel						
Channel	Page Title	Views	Reg.	Entries	Votes	Comments	Likes
facebook	Rocky Mountain Power	876	10	1	789	0	201
microsite	Act wattsmart Video Contest	1973	156	45	2153	0	NA
mobile	Act wattsmart Video Contest	3387	54	0	2236	0	NA

# **Paid Advertising**

### **Theater**

- Locations: The District, Jordon Commons, Thanksgiving Point, Valley Fair, Legacy Crossing, The Junction and Gateway.
- Total impressions: 1,954,228

### **Broadcast Radio**

- Entry promo 4/20 5/17, Voting promo 5/18 5/31
- Total broadcast impressions: 2,641,506\*

## **Total Traffic Radio**

- 4/20 5/8
- Total traffic impressions: 588,600

## **Print**

- 1 insertion: City Weekly, Daily Herald, Herald Journal, SL Trib, Deseret News, The Spectrum, Standard Examiner:
- Total impression: 272,622

Overall total impressions: 5,456,956

\*estimated number

### Appendix 7 - Exhibit F Page 8 of 12

# **Broadcast Radio Spots**

Entry promo "Family video"

Voting promo "Setting the scene"





# **Total Traffic Copy**

#### :15

Don't JUST be energy efficient. Be energy efficient and win ten thousand dollars in wattsmart upgrades. Enter the Act wattsmart Video Contest by May 17th with a 30 second video showing how you live wattsmart. Visit wattsmart dot com for more info.

#### :15

Get more than savings by being energy efficient. Enter the Act wattsmart Video Contest to win up to ten thousand dollars in efficient upgrades. Submit a video of your wattsmart tips by May 17th. Rules at wattsmart dot com.

### :10

Enter the Act wattsmart Video Contest for a chance to win up to ten thousand dollars in energy efficient upgrades. Submit your video by May 17th at wattsmart dot com.

#### :10

Win up to then thousand dollars in energy efficient home upgrades in the Act wattsmart Video Contest. Submit your video by May 17th at wattsmart dot com.

## Print Ad



# RIESTER

## Act wattsmart Video Contest Recap

# RIESTER

### **Winning Videos**

- 60 seconds in length (New requirement)
- Mix of storylines Soap Opera, Family Musical, Neighborhood Competition and Family Dog

### Winning Videos

- Grand Prize (\$10,000 value)
  - As the Meter Turns by Bill & Emily Grant (West Valley City/SLC)
- Runner Up (\$2,500/each value)
  - Be wattsmart & Be #1 by Mary Dewey (Lehi)
  - The Power to Save by Michael Doxey (Hyde Park/Logan)
- People's Choice (\$2,000 value)
  - Giant Triangle by Ashley Boice (Orem)







## Act wattsmart Video Contest Recap

#### **Best Practices for 2017**

- Video length 60 seconds or less
  - Increased opportunity to be viewed & voted on
  - Increased opportunity to repurpose videos
- Contest Awareness (per winners)
  - Top three avenues: Bill Insert, Social Media and eBlast
- Earned media
  - Creatively extend wattsmart messaging to broad audience
- Votigo platform
  - Easy to use
  - Mobile responsive
  - Permits specific time periods for entries and voting

# Exhibit G Video Contest Placements 2015

### Act wattsmart Video Contest 2015 Media

BROADCAST						
Initiative	Station	Date	Newscast	Tone	Viewers/Listeners	Info and Link
						No link available; Interview with Dave Eskelsen and Big Buhdah from the Home Show
	KSTU Fox 13	3/6/2015	Good Day Utah	POS	40,545	
						http://www.kutv.com/news/features/2news-this-morning/stories/Paul-Murphy-Rocky-Mountain-
Video Contest	KUTV2	3/10/2015	KUTV2 This Morning	POS	31,042	Power-video-contest-101572.shtml#.VQHWOna-zRA
Video Contest	KSL	3/13/2015	Noon News	POS	11,656	Teaser to interview
Video						
Contest/Starter Ktis	KSL	3/13/2015	Noon News - Browser 5.0	POS	10,337	http://www.ksl.com/?nid=1194&sid=33813761
	KSL	3/13/2015	Noon News - Browser 5.0	PUS	10,337	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Video						http://fox13now.com/2015/03/17/are-you-wattsmart-might-want-to-be-it-could-win-you-10k-in-
Contest/Starter Ktis	KSTU Fox 13	3/17/2015	Good Day Utah	POS	40,545	home-upgrades/
Video						
Contest/Starter Ktis	KTVX ABC4	3/17/2015	4 PM News	POS	21,793	\$790.32/per :30; interview 5 minutes
Video Contest	KPCW	3/17/2015	This Green Earth	POS	7,558	2 minutes announcement of contest at end of show
Video Contest	KPCW	3/31/2015	This Green Earth	POS	7,558	http://kpcw.org/post/green-earth-march-31-2015
Video	X96	4/10/2015	Radio from Hell	POS	15,100	No link available
Video Contest -	KZHT	5/15/2015	The Morning Zoo	POS	6,409	No link available
Video Contest -						
Winners & Summer						
Tips	UPR	6/17/2015	Utah Public Radio News	POS	N/A	No link available
Video Contest -	0110	0/11/2010	Ctarri abile readio rews	100	14//	TO MIK AVAILABLE
Winners & Summer						
Tips	KUTV2	6/17/2015	2News This Morning	POS	23,033	No link available
Video Contest -	KTVX ABC4	6/18/2015	Good Morning Utah	POS	1,743	No link available
Video Contest -	KTVX ABC4	6/18/2015	Good Morning Utah	POS	1,938	No link available
Video Contest -	FM 100 - recorded 6/17	6/21-22/2015	Inspirational Conversations with	POS	243,900	http://fm100.com/?sid=121890&nid=6
Video Contest -	The Arrow - recored 6/17	6/21-22/2015	Inspirational Conversations with	POS	142,300	http://fm100.com/?sid=121890&nid=7
Video Contest -	FM 100 - recorded 6/17	6/28-29/2015	Inspirational Conversations with	POS	243,900	http://fm100.com/?sid=121890&nid=8
Video Contest -	The Arrow - recored 6/17	6/28-29/2015	Inspirational Conversations with	POS	142,300	http://fm100.com/?sid=121890&nid=9
Video Contest -						
Winners & Summer	KSL	6/23/2015	KSL 5 News at Noon	POS	11,776	http://www.ksl.com/?nid=1194&sid=35206032&title=be-wattsmart-this-summer
Video Contest -						
Winners & Summer	Fox 13	6/24/2015	Good Day Utah	POS	36189	http://fox13now.com/2015/06/24/this-hilarious-video-scored-utah-couple-new-free-appliances/
Video Contest -						
Winners & Summer						http://www.good4utah.com/gtu/story/d/story/rocky-mountain-power-video-contest-
Tips	Good Things Utah KTVX/ABC4	6/26/2015	Good Things Utah KTVX/ABC4	POS	4,871	winners/56565/R2BJ7f5IJUu7ZqnjSQ1QDg
	TELEVISION/RADIO					
TOTAL FOR:	SUBTOTAL				1,044,493	
10171210111	332.3.7.2				1,011,100	
				_		
PRINT	Publication	Date	Headline	Tone	Circulation	Link
			1			
			Be a wattsmart star - You could win			
Video Contest	Ivins City News Newsletter	4/1/2015	\$10,000 in energyefficient upgrades	POS	0	Page 6; http://www.ivins.com/wp-content/uploads/2014/05/Newsletter-April-2015.pdf
video Contest	IVIII3 City News Newsiellei	4/ 1/2013		FUS	U	
			Previous wattsmart video winners			http://www.heraldextra.com/sanpete-county/previous-wattsmart-video-winners-share-experiences
Video Contest	Daily Herald Extra	5/6/2015	share experiences, tips	POS	23,489	tips/article_0f0bb160-82a9-5bef-a29e-3ffee94c75ec.html
			Sunday is deadline for Rocky			
Video Contest	Salt Lake Tribune	5/15/2015	Mountain Power's video contest	POS	177,132	No online link available
			Voting open in Rocky Mountain		1	http://www.heraldextra.com/sanpete-county/news/voting-open-in-rocky-mountain-power-s-
Video Contest	Daily Herald Extra	5/28/2015	Power's wattsmart video contest	POS	23,489	wattsmart-video-contest/article_a6a7c93e-f0da-54ee-9e37-b65456ee4dcd.html
	, , , , , , , , , , , , , , , , , , , ,		Rocky Mountain Power video		-,	http://news.hjnews.com/allaccess/hyde-park-man-wins-prize-in-rocky-mountain-power-
Video Contest	HJ News (Logan Herald)	6/17/2015	7	POS	45,860	video/article 6b84a820-59e1-5727-8ca9-51a5bb78ce41.html
video Contest	no news (Logan nerald)	0/11/2010	contest	PU3	40,000	video/article_obo4ao20-b361-5727-0035-513bb0700041.fttfff

			Locals win Rocky Mountain Power			http://www.heraldextra.com/news/local/locals-win-rocky-mountain-power-wattsmart-video-
Video Contest	Daily Herald Extra	6/24/2015	Wattsmart video contest	POS	23.489	contest/article 7945ad44-b885-5ce5-9e20-6bf437cadcd7.html
video Contest	Daily Fleraid Extra	0/24/2013	WVC couple wins Rocky Mountain	100	23,409	contestrations / 34-3au44-5003-5003-5003-5020-001437 daucur.html
Video Contest	Salt Lake Tribune	7/1/2015	Power Video Contest	POS	177.132	No online link available
Video Contest	CIRCULATION + PASSALONG	7/1/2013	1 ower video contest	1 00	177,132	NO Offilite little available
	RATE SUBTOTAL				1,176,478	
ONLINE	Website	Date	Headline	Tone	Unique Visitors	Link
			Paul Murphy: Rocky Mountain Power			http://www.kutv.com/news/features/2news-this-morning/stories/Paul-Murphy-Rocky-Mountain-
Video Contest	kutv2.com	3/11/2015	Video Contest	POS	255,227	Power-video-contest-101572.shtml#.VQHWOna-zRA
			Top ways to make your home energy-			http://fox13now.com/2015/03/17/are-you-wattsmart-might-want-to-be-it-could-win-you-10k-in-
Video Contest	fox13now.com	3/17/2015	effient & how it could win you \$10K	POS	1,425,385	home-upgrades/
			Rocky Mountain Power Launches			http://www.deseretnews.com/article/865624697/Rocky-Mountain-Power-launches-wattsmart-video
Video Contest	deseretnews.com	3/20/2015	wattsmart video contest	POS	1,188,818	contest.html?pg=all
Video Contest	extensionsustainability.usu.edu	3/1/2015	Act Wattsmart Video Contest	POS	N/A	https://extensionsustainability.usu.edu/event/act-wattsmart-video-contest/
video Contest	exterisionsustamability.usu.edu	3/1/2013	Previous wattsmart video winners	F03	IN/A	http://www.heraldextra.com/sanpete-county/previous-wattsmart-video-winners-share-experiences-
Video Contest	heraldextra.com	5/7/2015	share experiences, tips	POS	700,000	tips/article 0f0bb160-82a9-5bef-a29e-3ffee94c75ec.html
video Contest	ileiaidextia.com	3/1/2013	Voting open in Rocky Mountain	100	700,000	http://www.heraldextra.com/sanpete-county/news/voting-open-in-rocky-mountain-power-s-
Video Contest	heraldextra.com	5/28/2015	Power's wattsmart video contest	POS	700.000	wattsmart-video-contest/article_a6a7c93e-f0da-54ee-9e37-b65456ee4dcd.html
VIGOO COINCOL	nordidoxii di som	0/20/2010	Hyde Park man wins prize in		7.00,000	http://news.hjnews.com/allaccess/hyde-park-man-wins-prize-in-rocky-mountain-power-
Video Contest	hjnews.com	6/17/2015	Rocky Mountain Power video	POS	33,886	video/article 6b84a820-59e1-5727-8ca9-51a5bb78ce41.html
			Inspirational Conversations with			
Video Contest	http://fm100.com/	6/21/2015	Angel	POS	2,300	http://fm100.com/?sid=121890&nid=9
			-			
Video Contest	KSL.com	6/23/2015	KSL 5 News at Noon	POS	5,050,189	http://www.ksl.com/?nid=1194&sid=35206032&title=be-wattsmart-this-summer
Video Contest	Fox13now.com	6/24/2015	Good Day Utah	POS	1.468.969	http://fox13now.com/2015/06/24/this-hilarious-video-scored-utah-couple-new-free-appliances/
			Locals win Rocky Mountain Power		1,100,000	http://www.heraldextra.com/news/local/locals-win-rocky-mountain-power-wattsmart-video-
Video Contest	heraldextra.com	6/24/2015	Wattsmart video contest	POS	700,000	contest/article_7945ad44-b885-5ce5-9e20-6bf437cadcd7.html
						http://www.good4utah.com/gtu/story/d/story/rocky-mountain-power-video-contest-
Video Contest	Good4Utah.com	6/26/2015	Good Things Utah KTVX/ABC4	POS	10,729	winners/56565/R2BJ7f5lJUu7ZqnjSQ1QDq
	ON INF CURTOTAL				44 505 500	
	ONLINE SUBTOTAL				11,535,503	
	GRAND TOTAL				13,756,474	

Youtube	Video Title	Video Views	As of	Link
Video Contest	As the Meter Turns - 2015 Act Wattsmart	1,603	7/15/2015	https://www.youtube.com/watch?v=7qqRKJvIKMs
Video Contest	Giant Triangle - 2015 Act Wattsmart Video	672	7/15/2015	https://www.youtube.com/watch?v=v8gTryMHZzM
Video Contest	Power to Save - 2015 Act Wattsmart Video	769	7/15/2015	https://www.youtube.com/watch?v=zVSqPzk9rSs
Video Contest	Be wattsmart, Be Number 1 - 2015 Act	755	7/15/2015	https://www.youtube.com/watch?v=X3HmjBNWykI
Total Views All videos posted on 6/15/15		3,799		

# Exhibit H GSN Game Recap









Rocky Mountain Power custom game UT DSM 10/8/2015

### GSN Custom Game - UT DSM

4/1 - 9/30, 2015

Custom Game Hub Sponsorship - Geo-targeted to Utah service areas

- Rocky Mountain Power wattsmart custom 'Spot the Difference' game
- Link to Facebook site
- Video pre-roll unit
- "Tips to save" feature at end of game
- Desktop, tablet & mobile
- Companion banner ads direct to wattsmart.com
- Game promotion banner ads on gsn.com

### Custom Game Hub





Welcome, <u>VSamson</u> | <u>GSN Help</u> | <u>GSN Help</u> | <u>Purchase Tokens</u> | <u>Log Out</u>





Remember, turn off lights and electronics when not in use.



Home



**Cash Games** 

**All Games** 

My GSN

**Prizes** 

**Player News** 

**TV Shows** 

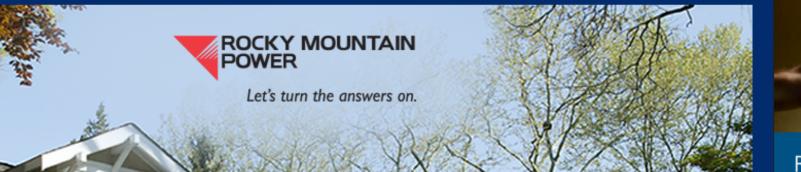


[X]



**Rocky Mountain Power: Spot the Difference** 





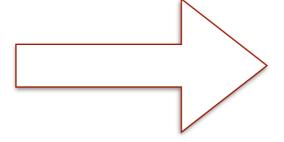




Remember, turn off lights and electronics when not in use.

### Custom Game Hub

**6.45**<sub>M</sub> booked impressions



**6.47**<sub>M</sub> delivered impressions

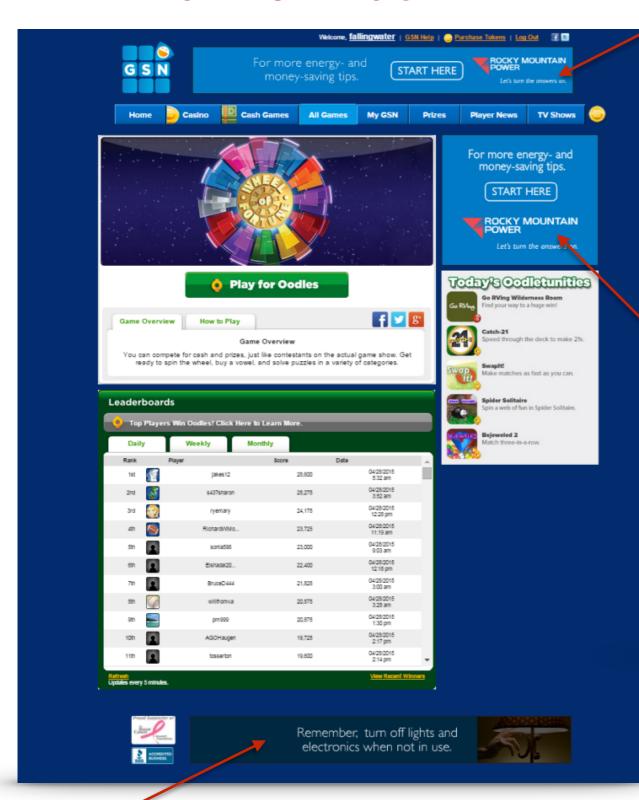
**1,207** game plays

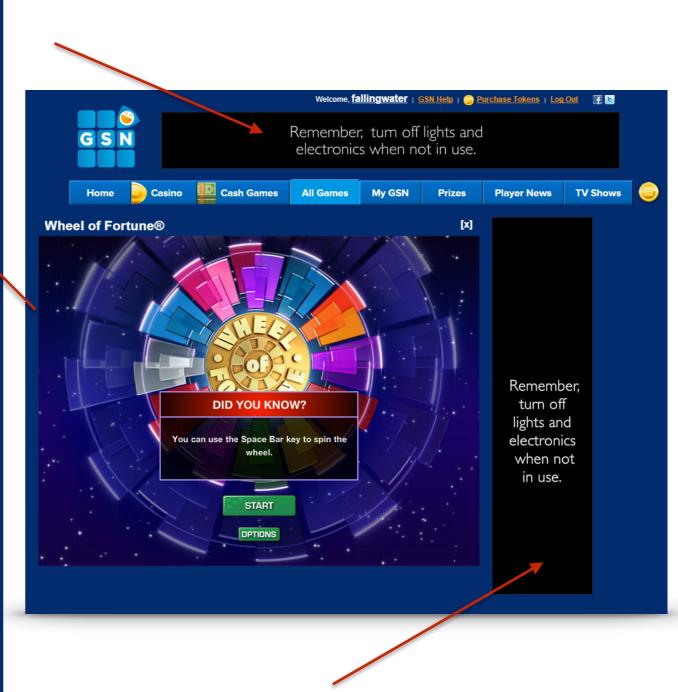
4.3<sub>K</sub> clicks

**6,980** game hub plays

.07% ctr

RMP Banner Ads





### RMP Banner Ads

728x90

2.98<sub>M</sub>

delivered impressions

216

clicks

.01%

ctr

160x600

42.6<sub>k</sub>

delivered impressions

23

clicks

.05%

ctr

300x250

3.44<sub>M</sub>

delivered impressions

 $4_k$ 

clicks

.012%

ctr

### Moat Recap

Premium - Rocky Mountain Power's digital creatives are exceeding Moat benchmarks. Users are spending more time viewing them and ads are In-View more frequently.







### In-View %

% of impressions where at least 50% of an ad was In-View for at least one continuous second.

75.1%

Benchmark: 55.1%

#### **In-View Time**

The length of time an ad has been active and In-View.

52.2 sec

Benchmark: 25.7 sec

### **Univ Interaction %**

% of impressions where a user entered the frame of ad and remained active for at least 0.5 seconds.

2.4%

Benchmark: 2.1%

### **Attention Quality**

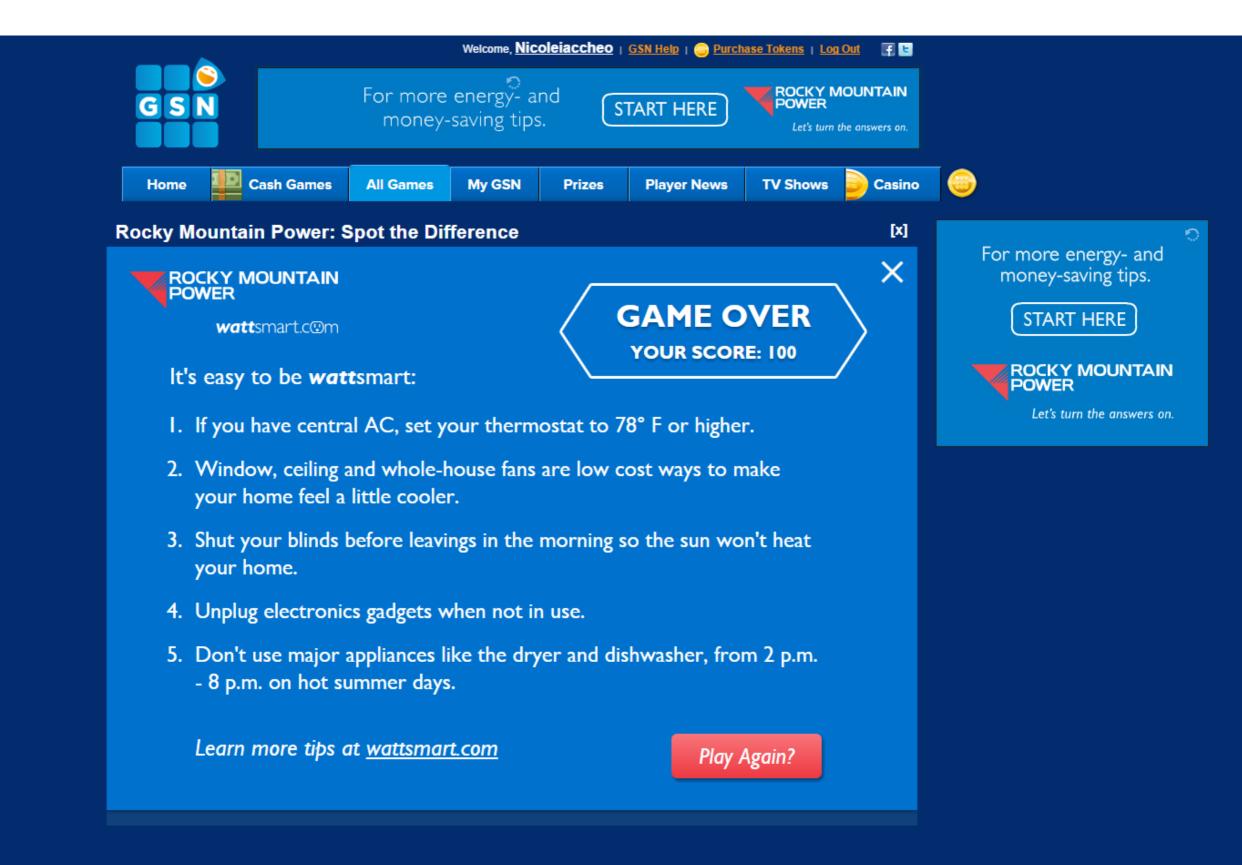
Ratio of users that converted from hovering to interacting.

33.7%

Benchmark: 20.2%



Low CTR for banners can be attributed to "Game Over" screen with call to action.

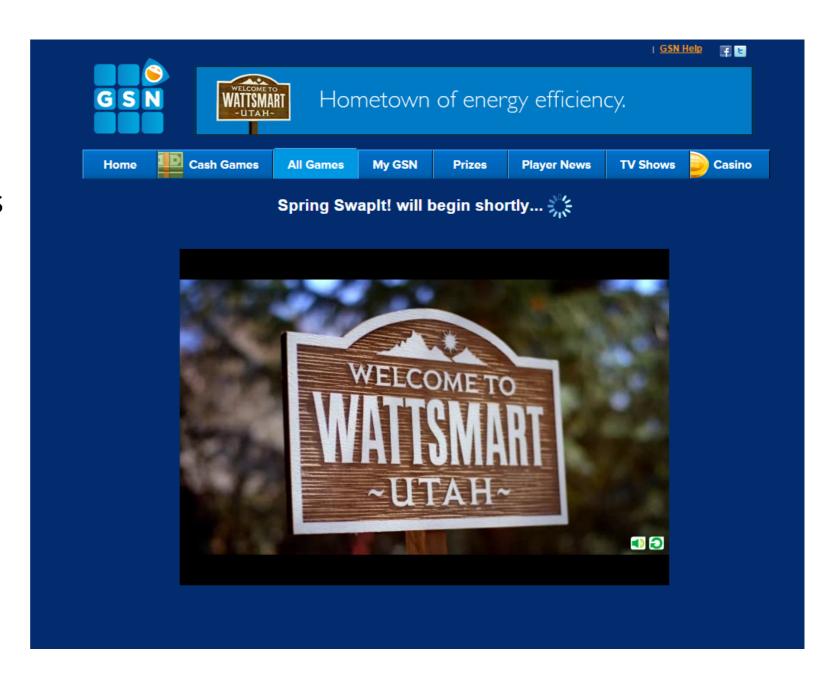


### Pre-game video unit

**278**delivered impressions

14 clicks

5.04% ctr



### **Custom Game Promotion Ads**



### Custom Game Promotion Ads

728x90

407<sub>k</sub>

delivered impressions

 $1.3_k$ 

clicks

.32%

ctr

160x600

292<sub>k</sub>

delivered impressions

432

clicks

.15%

ctr

300x250

 $3.4_k$ 

delivered impressions

932

clicks

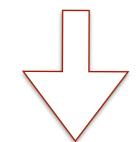
.27%

ctr

### Overall totals

7.45<sub>M</sub>

booked impressions



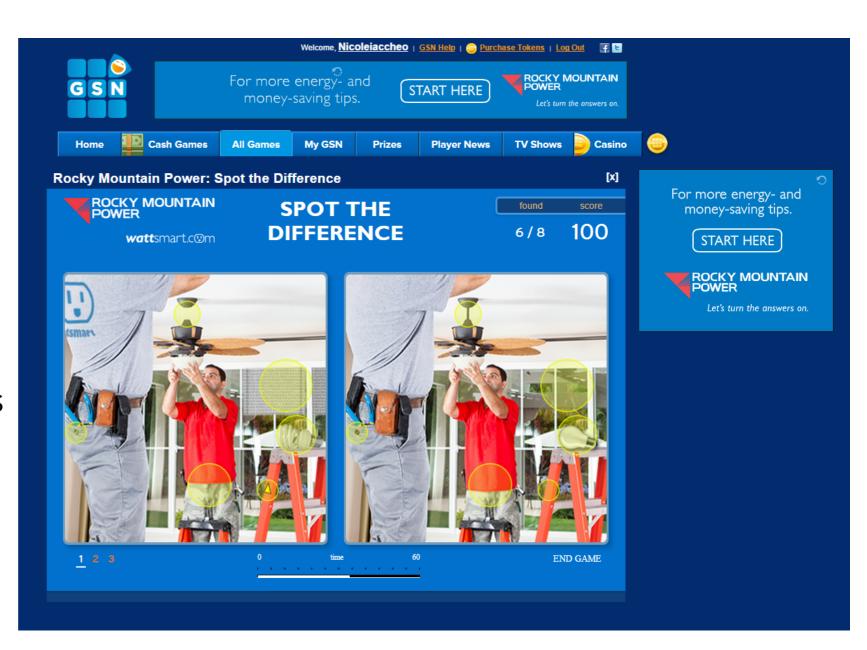
7.52<sub>M</sub>

delivered impressions

**7**<sub>K</sub> clicks

.09%

ctr

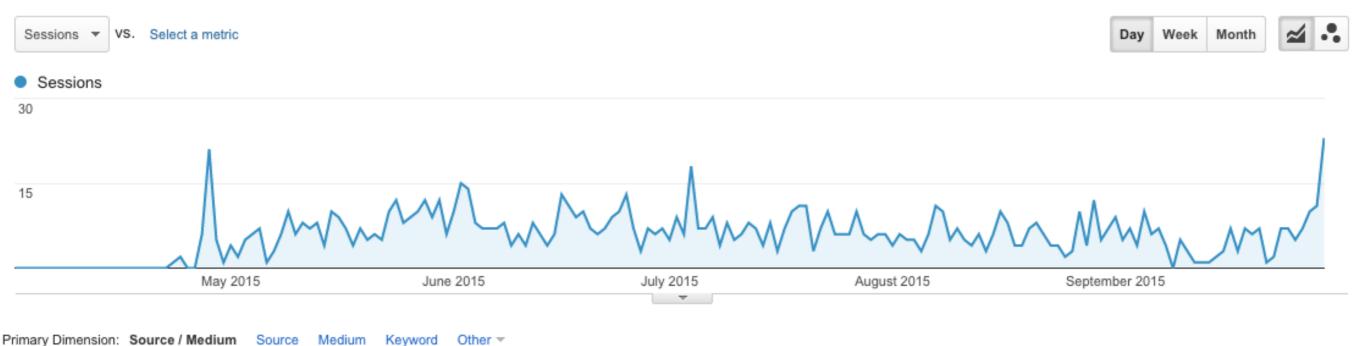


### Google analytics - traffic to wattsmart.com

The GSN game pulled in 1,072 sessions, 35.35% or 379 were new users.

Low bounce rate of 59.51%, which means people were looking at the site instead of just leaving.

They were on the site for at 5 minutes and 49 seconds.



## Google analytics - traffic to wattsmart.com

nary Dimension: Source / Medium Source Medium Keyword Other 🔻									
Plot Rows Secondary dimension ▼ Sort Type:	Default ▼				gsn			<b>■ ● Ξ</b>	
	Acquisition			Behavior			Conversions Goal 2: Contact Us ▼		
Source / Medium ?	Sessions .	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration ?	Contact Us (Goal 2 Conversion Rate)	Contact Us (Goal 2 Completions)	
	1,072 % of Total: 0.04% (2,688,226)	35.35% Avg for View: 40.87% (-13.50%)	379 % of Total: 0.03% (1,098,677)	59.51% Avg for View: 20.45% (191.04%)	4.08 Avg for View: 6.20 (-34.21%)	00:05:49 Avg for View: 00:03:30 (66.36%)	0.00% Avg for View: 0.32% (-100.00%)	0 % of Total: 0.00% (8,535)	
1. GSN / Custom Game	959 (89.46%)	31.80%	305 (80.47%)	58.08%	4.33	00:06:18	0.00%	0 (0.00%)	
2. gsn.com / referral	<b>78</b> (7.28%)	71.79%	56 (14.78%)	76.92%	1.76	00:01:00	0.00%	0 (0.00%)	
3. GSN / Promotion	<b>13</b> (1.21%)	69.23%	9 (2.37%)	53.85%	2.54	00:03:46	0.00%	0 (0.00%)	
4. GSN / Pre Load	9 (0.84%)	44.44%	4 (1.06%)	88.89%	1.22	00:01:19	0.00%	0 (0.00%)	
5. GSN / Default	6 (0.56%)	16.67%	1 (0.26%)	33.33%	3.33	00:06:49	0.00%	0 (0.00%)	
6. staging.gsn.com / referral	4 (0.37%)	50.00%	2 (0.53%)	75.00%	1.75	00:00:03	0.00%	0 (0.00%)	
7. qaweb2.gsn.com / referral	2 (0.19%)	100.00%	2 (0.53%)	0.00%	3.50	00:05:18	0.00%	0 (0.00%)	
8. GSN / banner	1 (0.09%)	0.00%	0 (0.00%)	100.00%	1.00	00:00:00	0.00%	0 (0.00%)	

# Exhibit I 2015 Digital Report

# DSM Executive Summary

Campaigns that ran were: Utah DSM, WY DSM, ID DSM, and WA DSM

DSM Display advertising delivered 18.9M impressions, 161,555 clicks, and a CTR of .85% - which is 8.5X above the National average of 0.1%

DSM delivered 120,271 search impressions, 3,125 clicks, and a CTR of 2.6% - which is 2.6X above the national average of 1%. Average position was 1.84 (goal is to be top 3!)

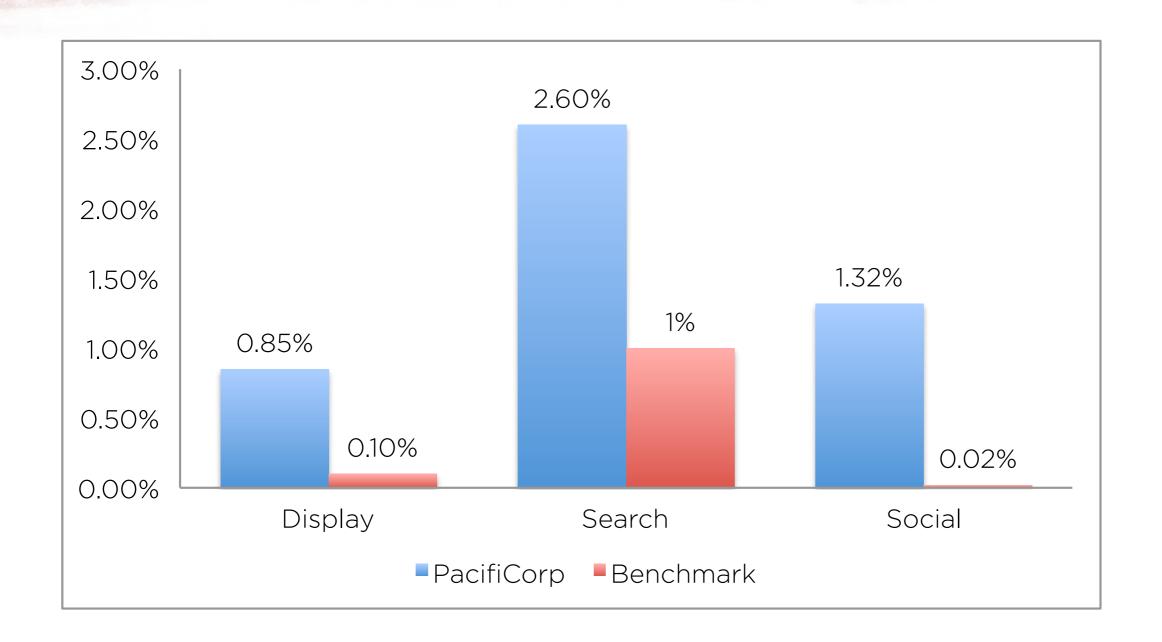
DSM delivered 1.7M facebook impressions, 22,999 clicks, and a CTR of 1.32%. DSM gained 201 new likes.

RIESTER will continue to optimize placements as the campaigns continue





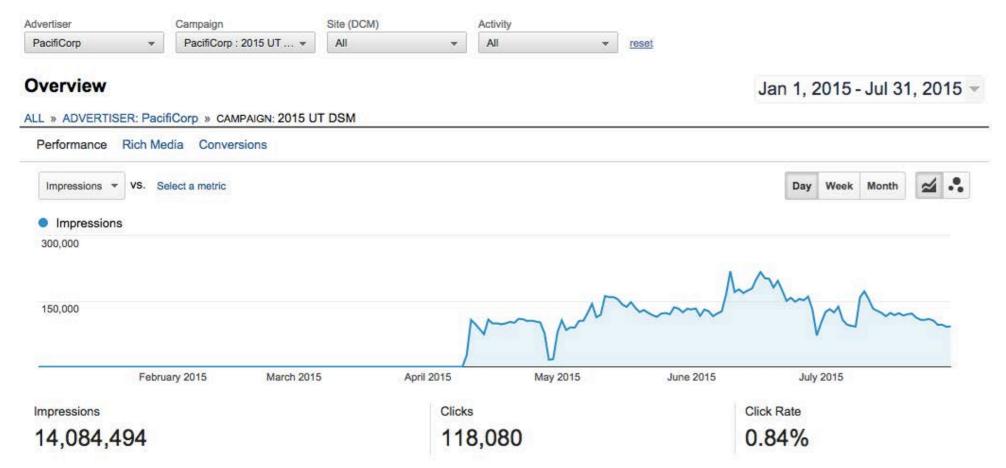
# DSM Benchmarks







## UT DSM



Sites: GSN (Custom Game), Conversant (Ad Network), KSL (local site), Deseret News (local site), and Hulu (Streaming video)

Impressions: 14M Clicks: 118,080

CTR: 0.84% - 8.4X above the National Average!

Hulu completion rate of 98.11%

Best performing site: Conversant performed the best with a CTR of 1.70%

Creative: Photo custom game on GSN, 78 degrees, LED, Peak Demand, Lighting, and Pre-roll



Let's turn the answers on.



# UT DSM WEBSITE TRAFFIC

		Acquisition		Behavior			
Source / Medium ?		Sessions ? ↓	% New Sessions	New Users ?	Bounce Rate	Pages / Session	Avg. Session Duration ?
		32,160 % of Total: 1.84% (1,744,441)	69.02% Avg for View: 41.28% (67.18%)	22,196 % of Total: 3.08% (720,174)	83.12% Avg for View: 21.00% (295.73%)	1.37 Avg for View: 6.03 (-77.34%)	00:00:45 Avg for View: 00:03:26 (-78.19%)
1.	conversant / banner	18,663 (58.03%)	71.18%	13,285 (59.85%)	82.91%	1.27	00:00:35
2.	KSL / gallerywrap	<b>6,170</b> (19.19%)	70.26%	4,335 (19.53%)	84.29%	1.42	00:00:40
3.	dnews / banner	<b>5,157</b> (16.04%)	63.08%	3,253 (14.66%)	86.41%	1.26	00:00:35
4.	Default / Banner	806 (2.51%)	75.19%	606 (2.73%)	83.00%	1.31	00:00:45
5.	KSL / banner	<b>636</b> (1.98%)	71.70%	456 (2.05%)	78.77%	1.44	00:00:58
6.	GSN / Custom Game	619 (1.92%)	31.18%	193 (0.87%)	58.16%	4.50	00:07:23
7.	hulu / video	82 (0.25%)	68.29%	<b>56</b> (0.25%)	68.29%	2.28	00:00:56
8.	GSN / Promotion	12 (0.04%)	66.67%	8 (0.04%)	50.00%	2.67	00:04:05
9.	GSN / Pre Load	8 (0.02%)	37.50%	3 (0.01%)	87.50%	1.25	00:01:29
10.	GSN / Default	6 (0.02%)	16.67%	1 (0.00%)	33.33%	3.33	00:06:49



# UT DSM WEBSITE TRAFFIC

	Acquisition		Behavior			
Source / Medium (?)	Sessions +	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration ?
	115 % of Total: 0.01% (1,744,441)	52.17% Avg for View: 41.28% (26.38%)	60 % of Total: 0.01% (720,174)	37.39% Avg for View: 21.00% (78.01%)	3.41 Avg for View: 6.03 (-43.44%)	00:02:28 Avg for View: 00:03:26 (-28.08%)
1. google / cpc	115(100.00%)	52.17%	60(100.00%)	37.39%	3.41	00:02:28

	Acquisition		Behavior			
Source / Medium ?	Sessions ? ↓	% New Sessions	New Users ?	Bounce Rate	Pages / Session	Avg. Session Duration ?
	2,228 % of Total: 0.13% (1,744,441)	87.57% Avg for View: 41.28% (112.11%)	1,951 % of Total: 0.27% (720,174)	93.81% Avg for View: 21.00% (346.59%)	1.15 Avg for View: 6.03 (-80.90%)	00:00:14 Avg for View: 00:03:26 (-93.37%)
1. facebook / banner	2,228(100.00%)	87.57%	1,951(100.00%)	93.81%	1.15	00:00:14



## RIESTER

# UT DSM SCREENSHOTS -CONVERSANT





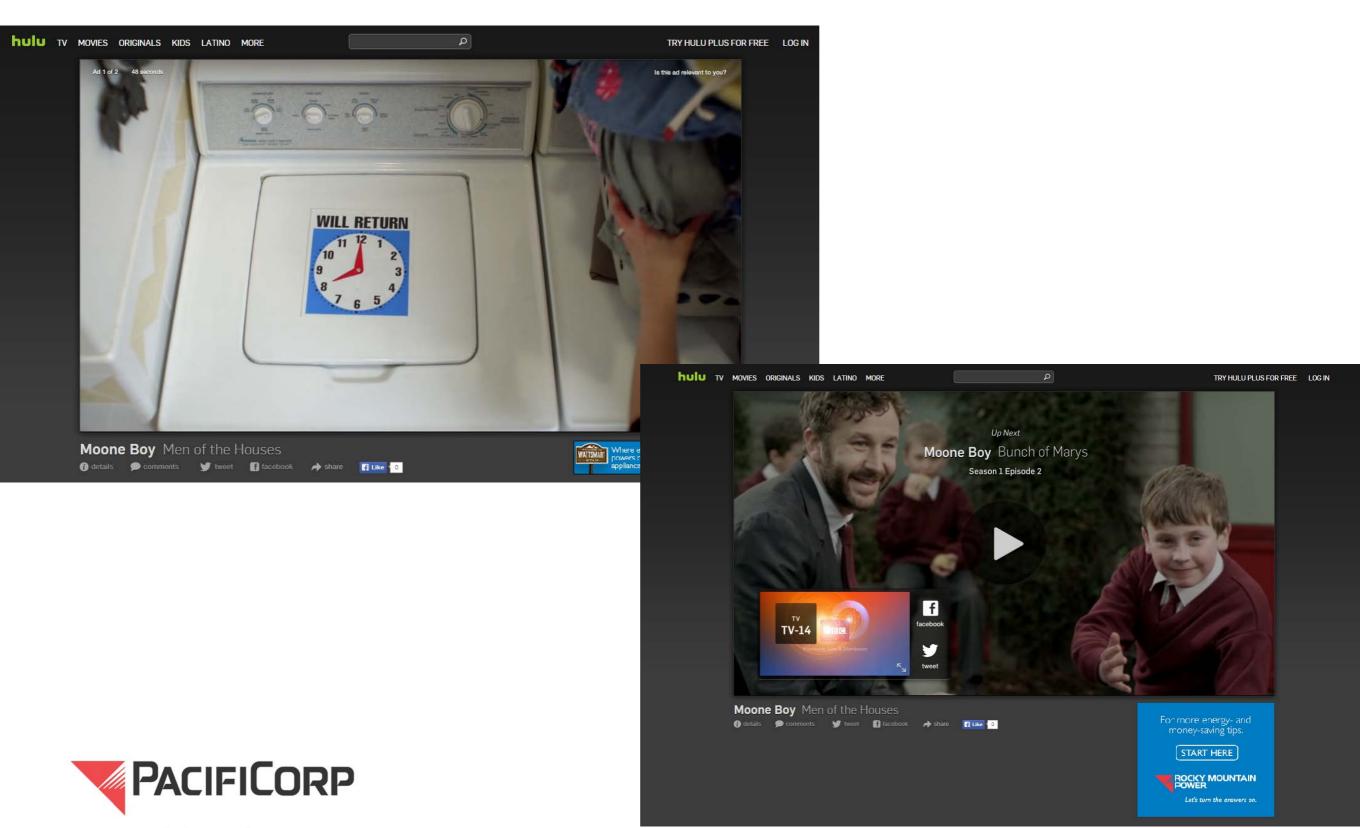




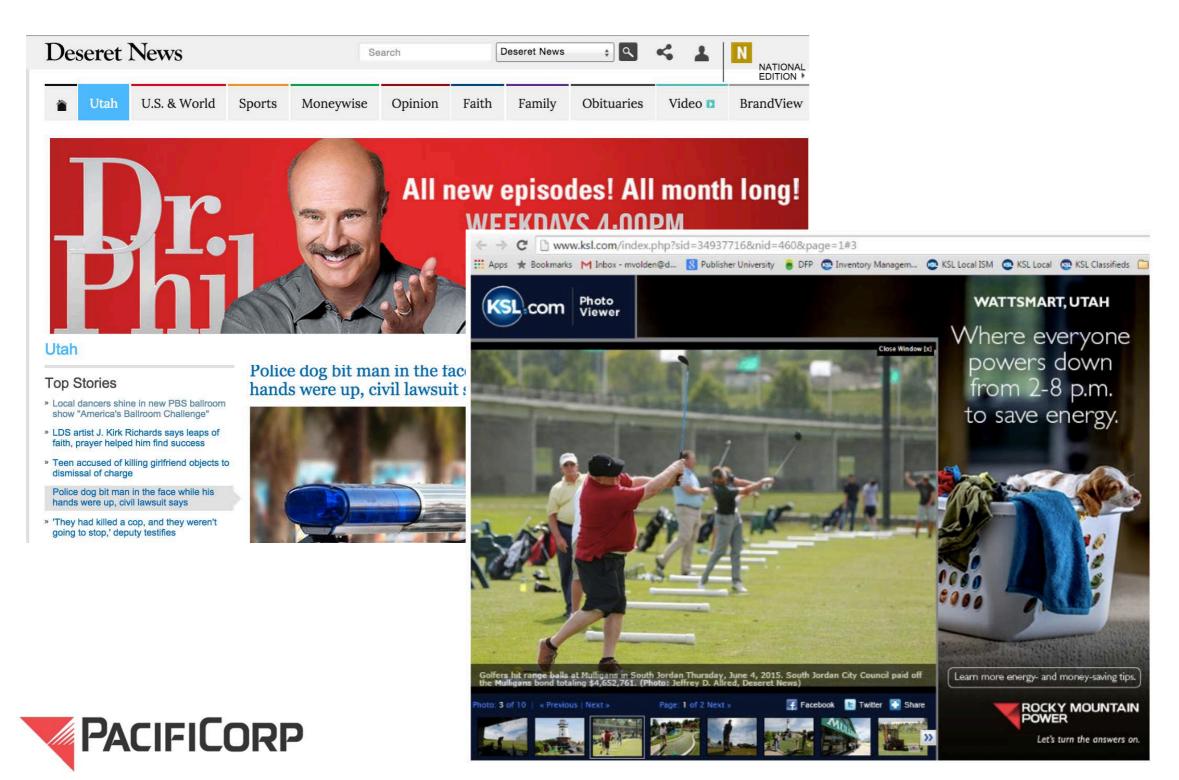
# UT DSM SCREENSHOTS - GSN



# UT DSM SCREENSHOTS - HULU



# UT DSM SCREENSHOTS - KSL



# UT DSM Search

UT DSM delivered 36,092 impressions, 1,293 clicks, and a CTR of 3.58%

Average position was 1.7 (Goal to be in top 3!)

Sample keywords:

- +conserve+energy
- +energy+saving tip
- +save+electric+bill

#### Electric Bill To High?

Reduce Your Energy - Save Money! Learn More at Rocky Mountain Power! RockyMountainPower.net/wattsmart

#### Save Money on Your Bills

Tips to Reduce Your Energy Learn More at Rocky Mountain Power! RockyMountainPower.net/wattsmart

#### Electric Bill To High?

Reduce Your Energy - Save Money Learn More at Rocky Mountain Power RockyMountainPower.net/wattsmart

#### Save Energy This Winter

Check Out The Top 10 Winter Energy-Savings Tips Today! RockyMountainPower.net/WinterTips

#### Top 10 Winter Energy Tips

Save Energy This Winter With Rocky Mountain Power Tips! RockyMountainPower.net/WinterTips

#### Electric Bill Too High?

Reduce Your Energy - Save Money Learn More at Rocky Mountain Power RockyMountainPower.net/wattsmart





# UT DSM Social

UT DSM ran April - July 2015

The campaign delivered 739,978 impressions, 14,485 clicks, and a CTR of 1.95%

The campaign garnered 135 likes



### Rocky Mountain Power



And hello, savings. Upgrade to a highefficiency evaporative cooler and soak up savings.



Hello, efficiency.

Receive huge cash back savi...

wattsmart.com

Learn More



#### Rocky Mountain Power

Sponsored · @



From LEDs to unplugging devices, Wattsmart, UT knows how to save energy. You can save too.



Efficiency's Hometown.

Simple changes such as was...

wattsmart.com

Learn More







# Confidential Appendix 8 Confidential Cost Effectiveness 2015 Utah Peak Reduction

# THIS EXHIBIT IS CONFIDENTIAL AND IS PROVIDED UNDER SEPARATE COVER