

Rocky Mountain Power

2011 Annual  
Energy Efficiency and  
Peak Reduction Report  
- Utah

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## **Introduction and Executive Summary**

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

Rocky Mountain Power currently offers nine energy efficiency and two load control programs in Utah with costs associated with these programs recovered through a tariff-rider, administered through Schedule 193 (the “Demand-side Management tariff rider”). Rocky Mountain Power promotes its energy efficiency and peak reduction programs to its Utah customers through a communications and outreach campaign intended to increase awareness of and participation in the Company’s programs, the costs of which are also recovered through Schedule 193.

The results of Rocky Mountain Power’s Utah energy efficiency and peak reduction activities for the reporting period of January 1, 2011 through December 31, 2011 are summarized in Table 1 on the following page.

**Table 1<sup>1</sup>: Total Portfolio Performance (Peak Reduction, Energy Efficiency and Marketing)**

DSM Cost Adjustment Revenues Collected						\$ 54,147,494
Program Expenditures (Excludes Self Direction Credits)						\$ 42,662,121
Program Expenditures Including Self Direction Credits						\$ 45,136,025
Load Under Management - MW						180.9
Target for Load Under Management - MW						162.0
Energy Efficiency Acquisitions, First Year Savings - MWh						257,615
Estimated Capacity Reduction from Energy Efficiency Savings - MW						44.5
Target Energy Efficiency Acquisitions, First Year Savings - MWh						211,016
Estimated Capacity Impact from Energy Efficiency and Load Under Management - MW						225.4
Estimated Lifetime Savings from Energy Efficiency Acquisitions - MWh						2,586,317
		PTRC	TRC	UCT	RIM	PCT
Cost Effectiveness (Five Tests)		2.282	2.075	2.128	1.168	2.903
Levelized Cost (\$/kWh)		NA	NA	NA		
Lifecycle Revenue Impact (\$/kWh)		NA				

Note: All values in Table 1 are gross and as measured at generation.

Customer participation in the peak reduction programs increased between 2010 and 2011 by approximately 5 percent providing the Company with 181 megawatts (at generation) of load under management. First year energy savings between 2010 and 2011 achieved through energy efficiency programs increased by 18 percent to 257,615 MWh (at generation).

Overall expenditures decreased by 9 percent between 2010 and 2011. Expenditures associated with the peak reduction programs increased by 15 percent<sup>2</sup> and energy efficiency expenditures decreased 13 percent.

At the end of 2011, the demand-side management balancing account had a balance of negative \$4.9 million on an accrual basis (cumulative revenue exceeds cumulative expenditures).

<sup>1</sup> Estimated lifetime savings of 2011 Energy Efficiency Acquisitions was calculated by multiplying First Year Acquisitions (measured at the generator) by the weighted average measure life of the portfolio of 9.9 years, no discount was assumed for possible savings degradation over the life of the measures. Cost Effectiveness Tests – Levelized costs and Lifecycle Revenue Impact calculations were not included at the overall portfolio level due to the inclusion of Load Management programs that do not assume any energy savings and therefore their costs would skew these calculations. See Appendix 2 for an explanation on how the capacity contribution savings values are calculated.

<sup>2</sup> In 2011, the Company changed convention for reporting program expenditures from a cash basis to an accrual basis.

## 2011 Performance and Activity

Program and Sector level results for 2011 are provided on the following table. Program Schedules are noted in parenthesis.

**Table 2: Utah Demand-Side Management Annual Results<sup>3</sup>**

<b>Load Management Programs</b>	<b>Units</b>	<b>kW/Yr (at site)</b>	<b>kW/Yr Savings (at gen)</b>	<b>Program Expenditures</b>
Cool Keeper (114)	114,706	117,568	129,143	\$ 5,916,668
Irrigation Load Control (96 and 96A)	230	49,000	51,806	\$ 2,502,866
<b>Total Load Management</b>	<b>114,936</b>	<b>166,568</b>	<b>180,949</b>	<b>\$ 8,419,534</b>
<b>Energy Efficiency Programs</b>	<b>Units</b>	<b>kWh/Yr Savings (at site)</b>	<b>kWh/Yr Savings (at gen)</b>	<b>Program Expenditures</b>
Low Income Weatherization (118)	1,107	1,677,625	1,842,787	\$ 245,567
Cool Cash (113)	4,813	2,378,881	2,613,082	\$ 1,379,749
Energy Star New Homes (110)	1,805	5,355,081	5,882,289	\$ 3,078,537
Refrigerator Recycling (117)	13,065	17,118,981	18,804,345	\$ 1,880,284
Home Energy Savings (111)	264,990	89,256,669	98,043,988	\$ 11,062,405
<b>Total Residential</b>	<b>285,780</b>	<b>115,787,237</b>	<b>127,186,490</b>	<b>\$ 17,646,541</b>
Energy FinAnswer (125)	45	21,067,189	23,043,081	\$ 3,602,273
FinAnswer Express (115)	925	29,954,438	32,763,865	\$ 4,578,940
Recommissioning (126)	4	3,520,821	3,851,039	\$ 367,156
Self Direction	15	3,645,179	3,987,060	\$ 142,301
<b>Total Commercial</b>	<b>989</b>	<b>58,187,627</b>	<b>63,645,045</b>	<b>\$ 8,690,671</b>
Energy FinAnswer (125)	48	40,692,398	43,022,445	\$ 4,907,786
FinAnswer Express (115)	101	9,671,079	10,224,845	\$ 1,287,819
Self Direction (192)	18	12,802,602	13,535,679	\$ 226,778
<b>Total Industrial</b>	<b>167</b>	<b>63,166,079</b>	<b>66,782,969</b>	<b>\$ 6,422,382</b>
<b>Outreach &amp; Communications + Class 4</b>				
Outreach and Communication Campaign				\$ 1,482,992
<b>Total Energy Efficiency</b>		<b>237,140,943</b>	<b>257,614,503</b>	<b>\$ 34,242,586</b>

**Total System benefit Expenditures - All Programs \$ 42,662,121**

Self Direction Credits \$ 2,473,904

**Total Utah Program Expenditures \$ 45,136,025**

<sup>3</sup> Savings values in this table are shown prior to any net-to-gross adjustment. The values at generation include line losses between the customer site and the generation source. The Company's line losses by sector are 9.85 percent for residential, 9.38 percent for commercial and 5.73 percent for industrial. These values are based on the Company's 2007 Transmission and Distribution Loss Study by Management Applications Consulting published in October 2008. See Appendix 2 for an explanation on how the capacity savings contributions are calculated.

## Major Trends and Activities

In 2011, the Company realized an increase in peak reduction acquisitions. The peak reduction programs delivered 5 percent more kilowatts of load under management, all of which is attributed to an increase in Cool Keeper program participation. Energy efficiency savings increased 18 percent when compared to 2010, most of which is attributed to an increase in the Home Energy Savings program savings.

The Company's energy efficiency program performance in 2011 increased across all customer sectors on a kWh/yr basis compared to 2010. Residential sector savings increased 28 percent, commercial sector savings increased approximately 9 percent and industrial sector savings (including agricultural savings) increased 9 percent.

Overall portfolio expenditures decreased by 9 percent compared to 2010, with peak reduction expenses increasing 15 percent and energy efficiency programs decreasing 13 percent. At a customer sector level, residential energy efficiency expenditures decreased by 25 percent while expenditures for commercial and industrial increased by 2 percent and 9 percent, respectively.<sup>4</sup>

## Cost Effectiveness

Consistent with the requirements outlined in the Commission orders in Docket No. 09-035-27, the Company provides cost effectiveness results utilizing the following five cost effectiveness tests;

1. PacifiCorp Resource Cost Test ("PTRC")
2. Total Resource Cost Test ("TRC")
3. Utility Cost Test ("UCT")
4. Ratepayer Impact Test ("RIM").
5. Participant Cost Test ("PCT")

The PTRC (also referred to as the TRC + Conservation Adder) is a variation of the TRC test. It includes a 10 percent benefit adder to account for non-quantified benefits of conservation resources over supply-side alternatives. This is consistent with Northwest Power Planning and Conservation Act.

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

The UCT, also referred to as the Program Administrator Test, compares the portion of the resource costs paid directly by the Company. This test is useful in determining the cost effectiveness of the resource from the Company's perspective; however it does not account for the portion of the cost that is borne directly by customers.

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<sup>4</sup> In 2011, the Company changed convention for reporting program expenditures from a cash basis to an accrual basis.

The RIM test determines the impact an energy efficiency program has on rates. The ultimate objective of an energy efficiency program is to encourage customers to use less energy, thereby reducing energy sales. The RIM test accounts for the cost of lost revenues to the utility associated with kWh sales reductions. The net impact of these reductions can put near-term upward pressure on rates even when total costs are lower with a successful energy efficiency program than with a supply-side alternative. One challenge with the RIM test however is that its more sensitive than the other tests to differences between long-term projections of marginal costs and long-term projections of rates, two cost streams that are difficult to quantify with certainty.

The PCT test compares the portion of the resource cost paid directly by participants to the savings realized by the participant. For the PCT test, bill savings are the realized benefit of energy efficiency rather than the avoided supply-side costs.

The results for each test are provided at several levels:

1. Overall portfolio level, consolidation of all Company delivered programs (i.e. energy efficiency and load management programs)
2. At individual resource type levels i.e. combined energy efficiency programs and separately for the combined load management programs
3. At customer sector levels for the energy efficiency programs i.e. all residential programs and all non-residential energy efficiency program portfolios
4. Individual program level
5. Measure or measure group level within certain programs

The portfolio and programs were cost effective with a UCT benefit/cost ratio of more than 1.0. The total portfolio was cost effective across all five cost effectiveness tests. The load management portfolio passed all cost effectiveness tests and the energy efficiency portfolio passed all cost effectiveness tests except the RIM test. At the Residential sector level, all tests except RIM were cost effective and the Commercial and Industrial sector level was cost effective from all perspectives.

Results of the cost effectiveness tests are included in the summary overview for each program, including a cost effectiveness discussion in each program section. Further details including key inputs and assumptions for each of the cost effectiveness test as well as measure group cost effectiveness results are provided in Appendix 1 of this report.



## Program Evaluation

Rocky Mountain Power Program Evaluation Timeline (Table 3 below) provides an outline of program evaluations completed or planned for Utah energy efficiency and peak load reduction portfolio.

**Table 3: Program Evaluation Timeline**

Program	Evaluation Type	Status	Anticipated Year Complete	Program Year(s) Evaluated	Evaluator
Low Income Weatherization	Process and Impact	Complete	2011	2007-2009	Cadmus
Home Energy Savings	Process and Impact	Complete	Q1 2012	2009-2010	Cadmus
See ya later, refrigerator®	Process and Impact	Complete	Q1 2012	2009-2010	Cadmus
Cool Cash	Impact	Complete	Q1 2012	2009-2010	Cadmus
Energy Star New Homes	Impact	In Process	Q2 2012	2009-2010	Cadmus
Cool Keeper	Process	Complete	Q1 2012	2009-2010	Cadmus
Energy FinAnswer	Process and Impact	Planning	2012	2009-2011	Navigant
FinAnswer Express	Process and Impact	Planning	2012	2009-2011	Navigant
Recommissioning	Process and Impact	Planning	2012	2009-2011	Navigant
Self Direction	Process and Impact	Planning	2012	2009-2011	Navigant

In 2011, an impact evaluation was completed for the Low Income Weatherization program. All program evaluation results are available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>. Findings from these evaluations will be key inputs to ongoing program design and modification as well as inputs to future cost effectiveness determinations.

## Plans for 2012

Program design modifications continue for Rocky Mountain Power's residential new construction program. The design modifications are intended to evolve the program requirements to align with Energy Star 3.0 guidelines; further influence efficiency in new construction practices; encourage the greater application of efficient lighting, appliance, and equipment technologies; and improve program economics. The redesign includes a non-Energy Star New Home path in recognition of the modest advancements in efficiency Energy Star 3.0 provides over Energy Star 2.0 while still wanting to encourage the advancement of energy efficiency technologies in the new homes market.

The Home Energy Savings programs existing measures will be updated to reflect recent code and standard changes such as clothes washers, dishwashers and electric water heaters. Several existing measures will be adjusted to accommodate cost increases such as lighting and insulation. New measures will be introduced providing additional opportunities for customers to participate such as freezers, heat pump water heaters, light-emitting diode lighting ("LEDs") and more. A qualified weatherization trade ally network will be proposed for insulation and window projects. Only trade allies in the weatherization trade ally network will be able to submit projects. The weatherization trade ally network will provide technical requirements for installing insulation and windows.

As part of the proposed changes to the Home Energy Saving program the Company intends to eliminate the Cool Cash tariff (Schedule No. 113) and incorporate all of the Cool Cash measures and requirements into the Home Energy Savings program. By integrating the two programs into one, the Home Energy Savings program will be able to offer a comprehensive suite of measures to improve the energy performance of an entire home.

FinAnswer Express will also be updated to reflect recent code and standard changes. New measures and measure categories will be proposed to broaden the impact of the program.

A review has been completed of the irrigation load control program. Based on the review the Company will be proposing changes to the irrigation load management program. Rocky Mountain Power is developing two new program offerings which will be proposed for introduction in 2012: a commercial and industrial load curtailment program and a residential home energy report program intended to educate customers on their energy usage and help them use less energy and save money.

## Advisory Group Meetings

Date	Topics and Issues Addressed
February 7, 2011	<ul style="list-style-type: none"> <li>• Overview of 2010 program performance</li> <li>• Proposed plan for program evaluations</li> <li>• Audit of the Energy Star New Homes Program</li> <li>• Communications and outreach planning</li> <li>• New program development activities</li> </ul>
June 23, 2011	<ul style="list-style-type: none"> <li>• Proposed changes to Energy Star New Homes program</li> <li>• Order pertaining to Home Energy Reporting</li> <li>• Program performance plan for 2011</li> <li>• Third year plan for Communication and outreach</li> </ul>
October 11, 2011	<ul style="list-style-type: none"> <li>• Year 2 communication and outreach report</li> <li>• Promotional program results</li> <li>• Home energy reporting</li> <li>• Proposed Changes to Energy Star New Homes</li> <li>• Proposed changes to Irrigation Load Control tariffs</li> </ul>
December 7, 2011	<ul style="list-style-type: none"> <li>• Demand-side Management Surcharge Rate Adjustment</li> <li>• Impact and Evaluation Cost treatment</li> <li>• Energy Star New Homes Program changes</li> <li>• Home Energy Savings Program changes</li> <li>• Sustaining Schedule 192 and 193</li> <li>• NBA Labor Dispute impact on the communication campaign</li> </ul>

## Company Filings with the Public Service Commission of Utah

The Company made several filings with the Commission regarding demand-side management during 2011. The dates of the filings with brief descriptions are provided below:

Date	Docket	Filing	Comment
January 25, 2011	11-035-T01	Modification to Cool Cash	
February 29, 2011	08-999-05	Home Energy Reports	Report submitted per Commission order
March 28, 2011	11-035-T03	Modifications to Cool Keeper	
April 1, 2011	09-035-36	2011/12 Communication Plan	
April 7, 2011	11-035-74	2011 Annual Report	Commission directed the company to provide additional information
April 21, 2011	11-035-T04	Modifications to Energy Star New Home	
April 29, 2011	09-035-T08	Semi-annual forecast of activity for demand-side management balancing account	
September 12, 2011	11-035-74	2011 Annual Report	Addendum
September 30, 2011	09-035-36	2010/11 Communication Report	
October 17, 2011	11-035-T11	Modifications to Energy Star New Homes	
November 1, 2011	10-035-57	2012 Forecast	
November 23, 2011	11-035-T13	Modifications to Low Income Weatherization	
November 23, 2011	10-035-T14	Request to reduce the demand-side surcharge	
December 15, 2011	11-035-74	2011 Annual Report	Addendum

## Outreach and Communications

### **wattsmart**

Rocky Mountain Power continued its **wattsmart** outreach and communications campaign in Utah to promote energy efficiency and conservation through education and increase customer awareness of and participation in the Company's demand-side management programs.

Highlights from 2011 included:

- Multi-media advertising campaign with new summer cooling ads
- Participation in Utah Jazz Green Team initiative with Utah Jazz and Salt Lake Bees
- "act **wattsmart**" video contest
- School curriculum and outreach with National Education Foundation Take Action At Home campaign and Rockin' Recess program in conjunction with Radio Disney
- Participation in multicultural outreach events
- Social media messages to promote demand-side management programs and ways to save energy

### **Advertising campaign**

From April to September, Rocky Mountain Power continued its **wattsmart** advertising campaign comprised of a multi-media mix designed to reach as many customers as possible with the greatest frequency.

New creative advertising for high-efficiency evaporative coolers and air conditioners was developed to rotate with other messages such as summer rates, Cool Keeper testimonials, peak usage times, ceiling fans/cooling, turning off lights, and how to operate your thermostat efficiently.

1. *Television:* The Company ran an average of 165 television spots per week. Estimated reach 97 percent. TV stations included KJZZ-TV, KSL-TV, KSTU-TV, KTVX-TV, KUCW-TV, KUTH-TV, KUTV-TV.
2. *Radio:* The Company ran an average of 193 radio spots per week. Estimated reach 82 percent. Radio stations included KBMG-FM, KDUT-FM, KEGA-FM, KJMY-FM, KSFI-FM, KSL-AM, KSOP-FM, KUBL-FM, KUER-FM, KZHT-FM, KKEX-FM.
3. *Print:* Newspapers included Salt Lake Tribune, Deseret News, The Standard Examiner, The Daily Herald, The Spectrum, Logan Herald Journal, Ahora Utah, Beaver Press, Blue Mountain Panorama, Emery County Progress Combo, Gunnison Valley Gazette, Millard County Chronicle Progress, Moab Times, Park City Record, Price Sun-Advocate, Richfield Reaper, Sanpete Messenger, Tooele Transcript, Vernal Express, Wasatch Wave.

Business publications included The Enterprise, Utah County Business Journal, Wasatch North Business Journal and Utah Business magazine.

4. *Outdoor*: Transit advertising in the Salt Lake metro area.
5. *Online*: Advertising on Google and Flash banners on HyperXMedia and MSN.

### **Utah Jazz/Salt Lake Bees**

Green Team sponsorship activities included:

- *wattsmart* TV and radio spots were aired during Utah Jazz game broadcast
- *wattsmart* print ad in Utah Jazz game program
- Green team spots featuring the Jazz Bear ran as part of the sponsorship
- Sponsored Utah Jazz Green Game on April 13
- *wattsmart* PSAs at Salt Lake Bees games
- Sponsored Salt Lake Bees Green Game on June 25

### **Act *wattsmart* video contest**

On April 25, Rocky Mountain launched the statewide “act *wattsmart*” video contest. The contest was designed to educate Utah citizens on energy efficient practices and encourage participation in the Company’s *wattsmart* programs. To enter, participants submitted a two-minute video of how they are being/can be more *wattsmart* – by using less energy and saving more.

Results of the contest:

- 32 customers entered videos in the contest
- 860 people voted in the people’s choice voting
- When entrants posted their videos to YouTube, all the videos combined received nearly 2,000 views
- After the videos were posted, Rocky Mountain Power’s website received nearly 8,000 views

### **National Education Foundation**

Rocky Mountain Power continued its involvement with The National Energy Foundation Take Action at Home Program. Teachers were invited to attend one of two energy efficiency and renewable workshops in March. Each workshop gave teachers an in-depth understanding of energy production as well as training for efficient and sustainable energy practices.

In the fall, the program provided 120 fifth grade energy presentations. More than 10,000 students and families were involved in these presentations, which included 368 Utah teacher participants.

### **Rockin’ Recess**

Through a sponsorship with the local Utah Radio Disney AM station, Rocky Mountain Power hosted several *wattsmart* Rockin’ Recess in-school events to reach out to children with an energy conservation theme.

Sponsorship elements included:

- A 45-minute “Rockin’ Recess” segment
- Five main teaching tips/tools on energy efficiency for the kids
- Two contests per segment, based on an energy efficiency theme
- A Rocky Mountain Power spokesman delivering energy efficiency messages to students

- Three energy-saving demonstrations
- Energy efficiency focused leave behind materials
- Thirty radio spots on Radio Disney AM 910 the week of the recess promotion
- A link from the Radio Disney AM 910 website to *wattsmart.com*

### **Multicultural Outreach**

To engage the Spanish-speaking market, Rocky Mountain Power participated in the following community events:

- Telemundo Kids Soccer Cup (July through September) in Salt Lake City displayed a Rocky Mountain Power *wattsmart* banner on the soccer fields throughout the season.
- Festival Latinoamericano (September 2, 3, and 5) held in Provo, drawing approximately 25,000 people over the three-day period. Rocky Mountain Power had a booth at this event manned by a bilingual representative. This sponsorship included Spanish language radio spots and on-site interviews with media partners.
- Fiesta Mexicana (September 17) held at the Utah State Fairgrounds in Salt Lake City during the closing weekend of the Utah State Fair. Rocky Mountain Power hosted a booth and received radio advertising.

### **Social Media**

Rocky Mountain Power's Utah Twitter account (@RMP\_Utah) is used to promote *wattsmart* programs, recruit customers and inform customers with *wattsmart* tips.

Additionally, Rocky Mountain Power's *wattsmart* Facebook community page ([www.facebook.com/rockymountainpower.wattsmart](http://www.facebook.com/rockymountainpower.wattsmart)) points customers to *wattsmart* programs and provides conservation ideas.

### **Home Energy Savings program**

Four bill inserts featured Salt Lake Tribune Home & Garden Festival coupon, ENERGY STAR® ceiling fans and room air conditioners, Deseret News Fall Home Show coupon, and duct sealing and insulation.

Two direct mail pieces were sent to Utah customers. About 7,000 past program participants received a coupon to attend the Home Remodeling & Decorating Show. Also, a duct sealing and insulation postcard was sent to homeowners in September.

New point-of-purchase materials were developed for the Home Energy Savings program. These items included in-store banners for big box retailers, compact fluorescent light ("CFL") cardboard kiosks, CFL booklet, CFL shelf flap, appliance table tents, appliance/lighting danglers and room air conditioner box stickers.

A retail sales associate promotion ran with the top 10 retailers in Utah in an effort to increase program participation from Black Friday through December 15.

### ***See ya later, refrigerator*<sup>®</sup> program**

Television, newspaper and online ads for the *See ya later, refrigerator*<sup>®</sup> recycling program ran in the Salt Lake market from February through November.

In addition, inserts were included in April, June and August bills. A direct mail with a magnet was sent to a targeted group of Utah residents in April and October.

### **Load control programs**

Utah growers received an enrollment mailing and a W9 mailing in 2011 for the Utah Irrigation Load Control program. The Cool Keeper program focused on maintaining its base of customers and continued to reach out to key audiences such as multifamily housing units.

### **Energy FinAnswer & FinAnswer Express programs**

Radio, newspaper and online ads for our commercial efficiency programs were placed each quarter in Utah. This included a thank you ad in January and February recognizing Utah businesses for completing energy savings projects in 2010.

A new handout was developed to communicate upcoming changes to the federal fluorescent lighting standards and encourage customers to upgrade now to get incentives.

### **Events**

Rocky Mountain Power program representatives participated in the following events in 2011:

- Energy FinAnswer & FinAnswer Express Alliance Workshop, February 24, at the South Towne Expo Center
- Salt Lake Tribune Home & Garden Festival, March 10-13
- Home Remodeling & Decorating Show, April 13-17, at the South Towne Expo Center
- Lowe's Earth Day Events
- Salt Lake Sustainable Building Conference, May 19-20
- Deseret News Fall Home Show, October 7-9, at the South Towne Expo Center

### **Newsletters**

Residential customers in Utah received Rocky Mountain Power's *Voices* newsletter in bills in January, March, April, May, July, September, October and November. Each issue covered energy efficiency and other topics.

Other newsletters such as Energy Insights, Energy Connections and Energy Update reach our community, business and government audiences on a quarterly or monthly basis. Each issue included information on energy efficiency and other topics.

### **Website**

Rocky Mountain Power website, **wattsmart.com**, includes information on energy efficiency incentive programs, tips and other resources for customers to save energy and money.



## 2011 Performance Compared to Forecast

In 2011, the Company delivered against Utah targets of 211,016 MWh/year of energy efficiency and 162 MW of load under management. These targets were filed with the commission on November 1, 2010.<sup>5</sup>

The Company exceeded these targets with energy efficiency acquisitions of 257,615 MWh/year and load under management of 180.9 MW.

**Table 4: 2011 Performance Compared to Forecast**

Rocky Mountain Power - Utah	2011 Forecast (Gross - At Gen)			2011 actual (Gross - At Gen)		
	MW	MWh	Costs	MW	MWh	Costs
Programs						
Cool Keeper	112		\$8,342,950	129.1		\$5,916,668
Irrigation Load Control	50		\$2,994,910	51.8		\$2,502,866
<b>Total Load Under Management</b>	<b>162</b>		<b>\$11,337,861</b>	<b>180.9</b>		<b>\$8,419,534</b>
Central A/C "Cool Cash"		2,611	\$1,415,835		2,613	\$1,379,749
Home Energy Savings		88,439	\$14,176,926		98,044	\$11,062,405
Refrig Recycle "SYLR"		24,274	\$2,840,259		18,804	\$1,880,284
Low Income Wx		1,164	\$213,136		1,843	\$245,567
Energy Star New Homes		1,837	\$2,233,488		5,882	\$3,078,537
Energy FinAnswer		46,864	\$7,912,890		66,066	\$8,510,059
FinAnswer Express		28,244	\$6,203,391		42,989	\$5,866,759
Self-Direction		11,583	\$357,710		17,523	\$369,079
Recommissioning		6,000	\$1,123,524		3,851	\$367,156
<b>Total Energy Efficiency</b>		<b>211,016</b>	<b>\$36,477,159</b>		<b>257,615</b>	<b>\$32,759,595</b>
Outreach and Communication Program			\$ 1,489,548			\$1,482,992
Power Forward			\$50,000			
<b>Total Expenditures (tariff rider)</b>			<b>\$49,354,567</b>			<b>\$42,662,121</b>
Self-Direction Credits issued			\$3,163,898			\$2,473,904

<sup>5</sup> Refer to Docket No 10-035-57

## Peak Reduction Programs and Activity

Rocky Mountain Power currently offers two peak reduction programs, the Irrigation Load Control program for agricultural customers and the Cool Keeper air conditioner load management program for residential and small commercial customers. Through these programs the Company has the ability to manage end use loads during the summer peak load period helping balance system requirements as needed. The flexibility of the peak reduction resources vary between programs and control options and range from fixed pre-scheduled and day ahead noticing or scheduling of participating irrigation loads to on-call day of dispatch control of air conditioner loads. The programs are designed to work in concert with customer needs, providing advance notice to business customers of when events are scheduled to occur and operation of the control in a manner that minimizes business disruptions and impacts to customer comfort.

A summary of the load management portfolio results is included in the following table.

**Table 5: Peak Reduction Portfolio Performance<sup>6</sup>**

kW Under Control (Gross - At Gen)	180,949					
kW Under Control (At Site)	166,568					
Total Expenditures	\$ 8,419,534					
Incentives Paid	\$ 3,488,919					
		PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness		Pass	Pass	Pass	Pass	NA

Note: No energy savings are associated with peak reduction programs. Therefore it is not appropriate to calculate levelized costs or lifecycle revenue impact.

<sup>6</sup> Decrement values are considered confidential on load control programs. Cost effectiveness ratios and inputs will be available under a protective agreement. A "Pass" designation equates to a benefit to cost ratio of 1 or better.

## Irrigation Load Control (Schedule 96 and 96A)

Available since 2007, Utah’s irrigation load management program provides participating agricultural customers on Schedule 10 load control service credits in exchange for growers curtailing irrigation pumping loads during summer afternoons, May 25 through September 15 annually. Under Schedule 96, the fixed scheduled control option, curtailment schedules vary from one to four interruptions per week with each interruption lasting three to six hours. Participants are paid an annual load control service credit of \$5.41 to \$11.19 per kilowatt of curtailment loads depending on the curtailment schedule the customer selects.

Under Schedule 96A, the day-ahead dispatchable control option, irrigation equipment is set up with a two-way control system. Customers who participate are notified 24 hours in advance of control events and have the choice to opt-out of a limited number of dispatch events per season. Annual load service credits for this program are paid on a graduated basis depending on total program participation. In 2011, load control service credits were \$28 per kilowatt of a grower’s participating loads.

For the fixed scheduled control option, there are no customer costs to participate in the program for pump sizes of above 25hp. Participating pumps less than or equal to 25hp in size incur a one-time \$170 set-up fee upon initial enrollment.

For the day ahead dispatchable control option, pump sizes generally must meet a minimum motor size requirement of 10hp to qualify and there are no customer costs to participate. Growers may, however, experience reductions in their participation credits for charges associated with opting out of a control event.

Summary program performance, expenditures, participation and cost effectiveness results are provided in the following table.

**Table 6: Irrigation Load Control Program Performance**

KW Under Control (Gross at Gen)	51,806					
KW Under Control (At Site)	49,000					
Expenditures - Total	\$ 2,502,866					
Participation Credits	\$ 1,322,389					
Program Operations Expense	\$ 1,180,477					
Participation (Customers)	230					
Participation (Sites)	650					
		PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	Pass	Pass	Pass	Pass	NA	

## **Program Reporting**

Program results reflect the nominal impact on the system during load control events. The kilowatt level available for dispatch is based upon historical analysis of usage for each participating site. The program results reflect the combined nominal reductions from the fixed scheduled control option program and the day ahead dispatchable control option program.

## **Major Trends and Activities**

In an effort to remain compliant with Internal Revenue Service's Revenue Ruling on Form 1099 reporting, the Company obtained current W9 forms from participants in the irrigation load control program.

## **Cost Effectiveness**

The program was cost effective from all perspectives. Decrement values or avoided costs are considered confidential on load control programs. Cost effectiveness ratios and inputs will be available under a protective agreement. A "Pass" designation equates to a benefit to cost ratio of 1 or better.

## **Plans for 2012**

The Company will propose changes to the irrigation load management program which would allow for more effective operation of the program.

## Cool Keeper (Schedule 114)

The Cool Keeper program is an air conditioner direct load management program targeting Utah residential and qualifying commercial customers (equipment size equal to or less than 7.5 tons) who cool their homes and businesses with electric central air conditioners and heat pumps. On select summer weekday afternoons, when electricity demand is at its highest, the Cool Keeper control equipment installed on a participating customer's cooling equipment is sent a signal to cycle the operation of the air conditioners compressor "off and on" for brief periods each hour in coordination with the air conditioners of other participating customers. For their participation, customers receive an annual "thank you" bill credit of either \$20 or \$40 per air conditioner being controlled depending on the size of the air conditioner. Commercial customers have the option of receiving a programmable thermostat in lieu of the "thank you" bill credit as an incentive for their participation. Like the direct control unit or switch used to control equipment for the majority of the program, the programmable thermostat is capable of receiving remote signals used to initiate control events but also has the added feature of doubling as an intelligent programmable thermostat customers can use to effectively manage their heating and cooling systems year around.

Implemented in 2003, the pay-for-performance based program sought to acquire 90 megawatts (at site) of dispatchable residential and qualifying commercial air conditioning participation by 2007 and contractually maintain participation through 2013, at which time program delivery would be reviewed and competitively re-procured. The 90 megawatt objective was based on an initial assessment of qualifying equipment in the Utah marketplace and program penetration rates of other similar and successful air conditioner load management programs in other jurisdictions.

Program results for 2011 are provided in the following table:

**Table 7: Cool Keeper Program Performance**

kW Under Control (Gross - At Gen)	129,143					
kW Under Control (At Site)	117,568					
Total Expenditures	\$ 5,916,668					
Incentives Paid	\$ 2,166,530					
Total Participation	114,706					
Residential	114,133					
Commercial	573					
		PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness		Pass	Pass	Pass	Pass	NA

## **Major Trends and Activities**

At the end of 2011, participation was 7 percent higher than in 2010 with 114,706 units enrolled in the program providing more than 129 MW at generation of temperature dependent load under management.

For the 2011 season, Rocky Mountain Power called a total of two curtailment events, both events occurred in August.

## **Cost Effectiveness**

The program was cost effective from all perspectives. Decrement values or avoided costs are considered confidential on load control programs. Cost effectiveness ratios and inputs will be available under a protective agreement. A “Pass” designation equates to a benefit to cost ratio of 1 or better.

## **Program Evaluation**

The program is implemented by a third party delivery vendor under a pay-for-performance contract structure. The contract includes a robust measurement and verification protocol that includes annual evaluation of program delivery utilizing information derived from a statistically relevant and representative set of metered control units. The meter data is used to assess the performance of the control network at large. In addition, the program maintenance process assesses the proper installation and operation of 20 percent of all installations on an annual basis, ensuring that all load control equipment is site inspected on a rotational 5-year basis. Results of the measurement and verification and maintenance processes are utilized for annual contract management and program reporting and tracking.

## **Plans for 2012**

In 2012, the contract pricing terms were amended with the third party contract administrator in order to continue marking and deploying load control devices in the program service territory. In addition, the agreement guarantees that the current population will be maintained through the 2013 peak reduction season.

## Energy Efficiency Programs and Activity

Energy efficiency programs deliver sustainable energy savings by improving the efficiency of equipment such as motors, lighting and cooling equipment. Energy efficiency is also delivered through improved weatherization of existing buildings, improving the design features of new facilities and ensuring they are constructed to exceed code. In the industrial sector, improvements in industrial equipment or processes can also improve energy utilization and deliver long term energy efficiency resources. Replacement of existing functional equipment, replacement of equipment at the end of its useful life and improvement opportunities all provide opportunities to deliver energy efficiency resources. While each type of opportunity has unique challenges, improvements in these areas all deliver long term energy savings over the life of the installed equipment.

To deliver resources from these different opportunities, the Company offers nine energy efficiency programs; five targeted to residential customers and four targeted to business customers. While customers may receive only one incentive per project or piece of equipment, the programs are designed to work in a coordinated fashion and provide complementary services (i.e. recycle an existing refrigerator after buying a new Energy Star model) or different incentive options (i.e., Energy FinAnswer incentives at the time a project is completed or Self Direction bill credits received over time). Some programs or program features are specifically designed to capture lost opportunities (Energy Star New Homes and the Design Assistance provision in Energy FinAnswer), while other programs target retrofit or replacement opportunities in existing structures (i.e., FinAnswer Express and Home Energy Savings).

Results for the 2011 Energy Efficiency Portfolio are presented in the following table:

**Table 8: Energy Efficiency Portfolio Performance**

System Benefit Expenditures (Excludes Self Direction Credits)	\$ 34,242,586				
Total Expenditures Including Self Direction Credits	\$ 36,716,490				
Energy Efficiency First Year Savings MWh/Yr (Gross at Generation)	257,614,503				
Energy Efficiency First Year Savings MWh/Yr (at Site)	237,140,943				
	PTRC	TRC	UCT	RIM	PCT
Portfolio Cost Effectiveness	2.125	1.932	3.024	0.896	2.553
Levelized Cost (\$/kWh)	\$ 0.0433	\$ 0.0433	\$ 0.0276		
Lifecycle Revenue Impact (\$/kWh)	\$ 0.0000291				

# Residential Energy Efficiency Programs and Activity

## Cool Cash (Schedule 113)

The residential Cool Cash program provides incentives for the purchase, best practice installation, and proper sizing of high-efficiency unitary electric and evaporative cooling equipment. Incentives are provided to both end use customers and installing contractors. The program has been in operation since 2003 and was relatively unique among Rocky Mountain Power’s energy efficiency programs, requiring annual approval by the Commission. This design was originally employed to better manage expectations among installing dealers. Qualifying equipment and incentive levels are adjusted as needed to remain relevant with evolving equipment standards and further improve program performance. The program is delivered by a third party program administrator under contract by the Company to manage trade ally education and participation, assist in the evolution of qualifying technologies, and process customer incentive applications.

**Table 9: Cool Cash Program Performance**

kWh Savings 2011 (Gross - At Gen)	2,613,082				
kWh Savings 2011 (At Site)	2,378,881				
Total Expenditures	\$ 1,379,749				
Incentives Paid (Includes Customer Incentives and Dealer Incentives)	\$ 923,875				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	NA	NA	2.131	0.920	NA
Levelized Cost (\$/kWh)	\$ (0.0066)	\$ (0.0066)	\$ 0.0688		
Lifecycle Revenue Impact (\$/kWh)	\$ 0.000000890				

Details of 2011 measure level participation are provided on the following table:

**Table 10: Cool Cash Program Participation**

Measure Participation	Units	kWh/Year Savings (at Site)
Evaporative Cooling - Replacements	464	562,368
Evaporative Cooling - New	234	283,608
Evaporative Cooling - Premium Only	485	587,820
Evaporative Cooling - Premium whole house ducted system	29	35,148
Central Air Conditioning - Sizing + TXV	983	260,495
Central Air Conditioning - Properly Installed	1,182	105,198
Central Air Conditioning - 15+SEER/12.5EER	1,436	544,244
<b>Totals</b>	<b>4,813</b>	<b>2,378,881</b>



## **Major Trends and Activities**

Participation decreased 8 percent and savings were 6 percent lower in 2011 compared to 2010. Program expenses were also 7 percent lower in 2011. Participation in the evaporative cooling measures continues to remain high. Continued focus on training existing equipment dealer and installers to influence the purchasing decision of end-use customer who are adding or replacing cooling equipment have contributed to the program participation and savings.

## **Cost Effectiveness**

The Cool Cash program was cost effective from only the UCT test perspective. Cost benefit ratios for PTRC and TRC are listed as NA since the customer cost per unit have a negative value, so a benefit cost ratio has no meaning. Appendix 1 provides detailed inputs used in the cost effectiveness analysis of this program as well as the measure level cost effectiveness results.

## **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>.

## **Plans for 2012**

Plans for 2012 include combining the Cool Cash program with the Home Energy Savings program. A continued emphasis will be placed on increasing the participation in the evaporative cooling market as well as overall program participation.



Details of 2011 measure level participation are provided in Table 12:

**Table 12: Energy Star New Homes Measure Participation<sup>7</sup>**

<b>Homes</b>	<b>Units</b>	<b>kWh/Yr Savings (at Site)</b>
Tier 1	991	1,737,223
Tier 2	173	399,457
Tier 3	2	6,466
Multi Family Tier 1	364	364,728
Multi Family Tier 2	254	163,830
<b>Total Homes</b>	<b>1,784</b>	<b>2,671,704</b>
<b>Plus Measures</b>		
14 SEER HVAC - SF	69	8,280
14 SEER HVAC - MF	48	5,760
Lighting Upgrade to 90% CFL MF	470	230,300
Lighting Upgrade to 90% CFL SF	514	505,776
Duct Placement	788	59,888
ENERGY STAR Dishwasher	1,085	32,550
ENERGY STAR Light Fixtures - SF \$20	694	1,241,850
ENERGY STAR Light Fixtures - SF \$50	20,421	911,880
ENERGY STAR Ceiling Fan	12	1,020
Whole House Fan System	3	1,080
Single Vent Evap Cooler	2	1,040
High Efficiency Evap Cooler	0	-
Ground Source Heat Pumps	16	249,088
<b>Total Plus Measures</b>	<b>24,122</b>	<b>3,248,512</b>
<b>Total Homes and Plus Measure Savings</b>		<b>5,920,216</b>

### Major Trends and Activities

Participation decreased by 23 percent in the Single-Family (Tier 1, 2 and 3) category and energy savings were 22 percent lower in 2011, compared to 2010. Multi-Family decreased by 18 percent and energy savings were 16 percent lower in 2011, compared to 2010. Overall energy savings were 10 percent lower in 2011, compared to 2010; overall program expenditures were 23 percent higher.

Participation in the Plus Measures category increased by 75 percent and energy savings decreased by 10 percent due to activity in the Lighting and CFLs measure category. The

<sup>7</sup> The reported program savings for 2011 were adjusted downward to reflect the potential of double counting of two plus measures (ENERGY STAR Fixtures and 90% CFL Lighting) as well as a discrepancy of deemed and measured savings for the plus measure, ENERGY STAR Fixtures. This adjustment is reflected in Table 1 savings.

ENERGY STAR light fixtures increased to 21,155 units in 2011, compared to 10,056 units in 2010.

The ENERGY STAR lighting measure was reduced to \$20 in May, of 2011, based on a review of market prices for lighting fixtures. However, all homes permitted prior to the tariff change qualified for the \$50 measure.

The National ENERGY STAR Program updated the program version from 2.0 to 3.0. In order to comply, the tariff was amended to allow version 2.5 and 3.0 homes to qualify for program incentives. By July 2012, all homes must qualify as Energy Star 3.0. In an effort to maintain savings and program cost effectiveness, redesign efforts were under way throughout the year.

In terms of program delivery, there were 169 builders with participation agreements in 2011, and all 169 submitted incentive applications during the year. In addition, the program provided training sessions and promotional support including:

- Builder and rater trainings, including the Utah Home Builders Annual Conference, National ENERGY STAR sponsored events, HVAC/duct sealing training, and quarterly training sessions for raters
- Co-operative advertising sponsorship including a television campaign
- Participation in building code workshops

The Company continued sponsorship (along with Questar Gas Company) of International Energy Conservation Code (IECC) code training delivered by the Utah State Energy Program.

### **Cost Effectiveness**

The expenditures associated with the redesign efforts will be allocated across 3 years (2011, 2012 and 2013).

Energy Star New Home program was cost effective from PTRC and UCT perspectives. Cost effectiveness calculations utilized realization rates based on the 2009-2010 program evaluation. In addition, the cost effectiveness analysis used a weighted average measure life based on measure lifetimes, and weighted by savings and frequency of measure installations. Appendix 1 provides detailed inputs used in the cost effectiveness analysis of this program. Reported savings for the program utilize ex-ante savings for 2010, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

### **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>

## **Plans for 2012**

The Company will be proposing significant modifications to the New Homes program based on the new version of ENERGY STAR New Homes. Based on builder surveys it is expected that stricter ENERGY STAR qualification requirements will lower the estimated participation in the program significantly. As a result, the Company is assessing the cost and savings of measures beyond ENERGY STAR's certification. Based on the recent process and impact evaluation, changes will occur in the program administration, measure design and incentive levels to lower program costs and sustain savings. The Program will focus on increasing savings by diversifying its qualifying measures to builders. The Company will propose a new program design that will offer multiple above code measures, which will allow builders to take intermediate steps towards meeting the updated ENERGY STAR Version 3 standards starting in 2012.

## Home Energy Savings Program (Schedule 111)

The Home Energy Savings program provides a broad framework to deliver incentives for more efficient products and services installed or received by Utah customers in new or existing homes, multi-family housing units and manufactured homes. The program is delivered through a third party administrator hired by the Company. Program information is available to the public at the Company's energy efficiency Web site at <http://www.rockymountainpower.net/env/epi.html>.

Eligible program measures include: clothes washers, refrigerators, water heaters, dishwashers, lighting (both CFLs and fixtures), cooling equipment services such as tune-ups, duct sealing and insulation, and home improvement measures such as insulation and window upgrades. Incentives are provided to customers through two methods: (1) post-purchase application process with incentives paid directly to participating customers, and (2) mid-market (i.e., retailers and manufacturers) buy-downs, for delivery of CFL incentives. Mid-market buy-downs result in lower retail prices for customers at point-of-purchase and involve no direct customer application process.

Program results for 2011 are provided in the following table:

**Table 13: Home Energy Savings Program Performance**

kWh/Yr Savings 2011 (Gross - At Gen)	98,043,988				
kWh/Yr Savings 2011 (At Site)	89,256,669				
Expenditures	\$ 11,062,405				
Incentives Paid	\$ 6,246,273				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	1.816	1.651	2.440	0.715	2.966
Levelized Cost (\$/kWh)	\$ 0.0533	\$ 0.0533	\$ 0.0361		
Lifecycle Revenue Impact (\$/kWh)	\$0.00002333				
Discounted Participant Payback (Years)	1.27				

Details of 2011 measure level participation are provided in Table 14:

**Table 14: Home Energy Savings Measure Performance**

<b>Home Energy Savings Measures</b>	<b>Unit Measure</b>	<b># of Units</b>	<b>Participants (Gross - At Site)</b>	<b>kWh/Yr Savings</b>
Clothes Washer-Tier One (2.0-2.45 MEF)	Units	238	238	33,563
Clothes Washer-Tier Two (2.46+ MEF)	Units	374	374	60,189
Dishwasher	Units	188	188	8,867
Electric Water Heater	Units	35	35	4,227
Refrigerator	Units	5,543	5,542	263,421
Room AC	Units	179	178	17,714
Insulation: Attic-Tier One	Sq Feet	649,602	348	166,152
Insulation: Attic-Tier Two	Sq Feet	8,813,055	5,083	1,601,259
Insulation Spiff (Attic insulation + Floor/Wall)	Sq Feet	134	134	-
Insulation: Floor	Sq Feet	737	2	3,010
Insulation: Wall	Sq Feet	518,952	612	290,748
Windows	Sq Feet	448,053	3,211	347,831
CAC Tune up	Projects	221	221	13,482
Duct Insulation	Projects	4	(2)	2,018
Duct Sealing	Projects	1	(2)	(9)
Duct Sealing & Insulation - Electric	Projects	1,526	1,014	995,084
Duct Sealing & Insulation - Gas	Projects	1,726	2,243	1,020,287
Heat Pump Tune-Up	Projects	-	-	-
Ceiling Fans	Units	445	301	70,755
Fixtures	Units	4,277	1,814	212,224
CFLs-Specialty Bulbs	Bulbs	645,949	64,595	19,778,446
CFLs-Twisters	Bulbs	1,788,615	178,862	64,367,400
<b>Totals</b>		<b>12,879,855</b>	<b>264,991</b>	<b>89,256,669</b>
kWh/Yr Savings at Generation				98,043,988

(Note: CFL Participation is assumed at 10 CFLs per participant.)

### Major Trends and Activities:

Savings increased by 48 percent in 2011, over 2010. The savings growth was driven by increases in CFL twisters and specialty bulbs, duct sealing and insulation, windows, wall insulation and tier two attic insulation. Lighting promotions, end caps, and headerboards in stores such as Home Depot, Walmart, and Lowe's led to sales of over 1.2 million additional bulbs in 2011, over 2010.

Trade allies and customers taking advantage of the insulation spiff (a bonus incentive for insulating the attic and floor or wall at the same), increased from 16 in 2010, to 135 in 2011.

Focused outreach to multifamily properties produced significant results in 2011, with multifamily properties accounting for nearly all of the duct sealing and duct insulation savings for the year.

Eliminating incentives in 2010, for clothes washers and dishwashers using natural gas water heat presented challenges in 2011. To avoid customer confusion some retailers refused to allow the program to place point-of-purchasing materials on qualifying clothes washers and dishwashers due to the small percentage of customers who have electric water heat.

Online incentive applications were made available in 2011 for clothes washers, dishwashers, electric water heaters, refrigerators and room air conditioners.

### **Cost Effectiveness**

The program was cost effective from all perspectives except the RIM test. Appendix 1 provides detailed inputs used in the cost effectiveness analysis of this program as well as measure group cost effectiveness results. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

### **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>

### **Plans for 2012**

The company will be proposing modification to this program during 2012. Existing measures will be updated based on recent code and standard changes such as clothes washers, dishwashers and electric water heaters. Several existing measures will be adjusted to accommodate cost increases such as lighting and insulation. New measures will be introduced providing additional opportunities for customers to participate such as freezers, heat pump water heaters, LEDs and more. A qualified weatherization trade ally network will be proposed for insulation and window projects. Only trade allies in the weatherization trade ally network will be able to submit projects. The weatherization trade ally network will provide technical requirements for installing insulation and windows.

As part of the proposed changes to the Home Energy Saving program the Company will propose eliminating the Cool Cash tariff (Schedule No. 113) and incorporating the Cool Cash measures and requirements into the Home Energy Savings program. By integrating the two programs into one, the Home Energy Savings program will be able to offer a comprehensive suite of measures to improve the energy performance of an entire home.



## See ya later, refrigerator® (Schedule 117)

The Utah refrigerator recycling program, See ya later, refrigerator®, is available to Utah residential customers through a Company contract with a third-party program administrator. Older refrigerators and freezers which are less efficient, yet operational, are taken out of use permanently and recycled in an environmentally responsible manner. The program's objective is to permanently retire these older and less efficient refrigerators and freezers from the market and recycle the units in order to avoid the re-entry or resale in the secondary appliance market. Program awareness is generated through mass media advertising channels as well as Company channel communications such as the program's website, bill stuffers, and customer newsletters. In addition to free pick-up and a nominal cash incentive, participants receive an energy efficiency packet consisting of ENERGY STAR®-certified compact fluorescent light bulbs, a refrigerator/freezer thermometer, and energy education materials.

Program results and details of participation for 2011 are provided in the following tables:

**Table 15: See ya later, refrigerator® Program Performance**

kWh Savings 2011 (Gross - At Gen)	18,804,345				
kWh Savings 2011 (At Site)	17,118,981				
Expenditures	\$ 1,880,284				
Incentives Paid	\$ 391,950				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	3.374	3.067	2.428	0.644	NA
Levelized Cost (\$/kWh)	\$ 0.0242	\$ 0.0242	\$ 0.0305		
Lifecycle Revenue Impact (\$/kWh)	\$0.000016366				
Discounted Participant Payback (years)	NA				

**Table 16: See ya later, refrigerator® Results**

Refrigerator Recycling Measure	Unit Count	Per Unit Savings (kWh/Yr)	Gross Savings (kWh/Yr)
Refrigerator	10,572	1,149	12,147,228
Freezer	2,493	1,590	3,963,870
<b>Total Units Recycled</b>	<b>13,065</b>		<b>16,111,098</b>
Energy Savings Kits	12,443	81	1,007,883
<b>Total (At Site)</b>			<b>17,118,981</b>
<b>Total (At Generation)</b>			<b>18,804,345</b>

## **Major Trends and Activities**

Participation for 2011 decreased 16 percent compared to 2010, as the economic slowdown continued to impact program participation. However, the program did deliver more than 18,800 MWh of first year energy savings during the year, with program expenditures decreasing 21 percent from 2010.

In terms of the impact of the program on the environment, processing the 13,065 units resulted in the recycling of more than 1.7 million pounds of metal, 261,620 pounds of plastics, 19.5 tons (39,243 lbs) of tempered glass and the capture, recovery or destruction of more than 10,857 lbs of ozone depleting Chlorofluorocarbons (“CFC”) and Hydro fluorocarbons (“HFC”), commonly used in refrigerants and blowing agents for polyurethane foam insulation. The Carbon Dioxide (“CO<sub>2</sub>”) and Equivalent carbon dioxide (“CO<sub>2</sub>e”) avoided from the atmosphere was in excess of 65,500 tons.

## **Cost Effectiveness**

The program was cost effective from all cost tests except the RIM test. There are no participant costs, so results of that test were not calculated. Appendix 1 provides detailed inputs used in the cost effectiveness analysis of this program as well as measure level cost effectiveness results. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year’s evaluation and/or other relevant studies.

## **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp’s website at <http://www.pacificorp.com/es/dsm/utah.html>.

## **Plans for 2012**

The marketing campaign will continue to use a five-pronged approach (mass media/advertising, direct mail, utility marketing channels, public relations and retail marketing/promotions) for reaching customers and promoting the program.

## **Low Income Weatherization (Schedule 118)**

The low income weatherization program provides weatherization and efficient appliance upgrades to income-qualified households on a no-cost basis. The program is administered by the Utah Department of Community and Culture (“DCC”) who in addition to funding from the Company receives funds from the federal government. The federal monies can be used for household repairs as well as weatherization and other low income program services. This partnership allows for leveraging of Company funding with federal grants resulting in more comprehensive assistance to qualified households and a greater number of homes served.

The Company began working with local agencies in the delivery of program services in 1992. Recognizing that the majority of households in Rocky Mountain Power’s service territory did not heat their homes with electricity, making the weatherization services component of the program less relevant to the Company’s customers, the program was revised in 2005 to make it more applicable. Today, the majority of Company funding provided to DCC in support of program services is targeted towards the cost of electric efficiencies related to lighting and refrigerators. Since 1992, Rocky Mountain Power has provided funding on measures installed in over 5,400 homes.

The program is available to income qualifying customers who either own or rent single-family homes, manufactured homes or apartments.

Table 17 summarizes program activities in 2011. Expenditures of \$245,567 were covered by Rocky Mountain Power in support of the program. Of those expenditures, \$184,992 is attributed to agency incentives and administrative fees, with the balance of the costs attributable to utility administration of the program and evaluation costs. Funds received by the agency from other sources are not included in Table 17. The cost for this program was \$222 per home.

**Table 17: Low Income Weatherization Performance**

kWh/Yr Savings (at Gen)	1,842,787				
kWh/Yr Savings (at Site)	1,677,625				
Expenditures - Total	\$ 245,567				
Participation - Total # of Completed/Treated Homes	1,107				
<b><u>Number of Homes Receiving Specific Measures</u></b>					
Efficient Furnace Fans	254				
<b><u>Number of Specific Measures</u></b>					
Compact Fluorescent Light bulbs	20,935				
Replacement Refrigerators	410				
Refrigerator Testing	720				
		PTRC	TRC	UCT	RIM
Program Cost Effectiveness		4.780	4.350	4.350	0.790
Levelized Cost (\$/kWh)		\$ 0.0197	\$ 0.0197	\$ 0.0197	
Lifecycle Revenue Impact (\$/kWh)		\$ 0.0000012			

**Major Trends and Activities**

The Utah Department of Community and Culture forwarded a request asking Rocky Mountain Power to consider providing incentives on shell measures in homes with air conditioning systems. The Company’s Planning and Development staff are analyzing this request to determine if the addition of these measures is cost effective.

**Cost Effectiveness**

The program was cost effective from all cost tests except the RIM test. There are no participant costs, so results of that test were not calculated. The cost for this program was \$222 per home. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year’s evaluation and/or other relevant studies.

**Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp’s website at <http://www.pacificorp.com/es/dsm/utah.html>.

**Plans for 2012**

Rocky Mountain Power staff will analyze the addition of incentives on shell measures in homes with air conditioning systems to determine if it is cost effective and based on the results of this analysis, may request program revisions.

# Non-Residential Energy Efficiency Programs and Activity

## Energy FinAnswer (Schedule 125)

The Energy FinAnswer program with the incentive offer has been available to Utah business customers since 2001.

The program provides Company-funded energy engineering, incentives of \$0.12 per kWh of first year energy savings and \$50 per kW of average monthly demand savings up to a cap of 50 percent of the approved project cost. The program is designed to target comprehensive projects requiring project specific energy savings analysis and operates as a complement to the more streamlined FinAnswer Express program. In addition to customer incentives, the program provides design team honorariums (a finder fee for new construction projects) and design team incentives for new construction projects exceeding current Utah energy code by at least 10 percent.

The summary program results for 2011 are provided in the following table:

**Table 18: Energy FinAnswer Program Performance**

kWh/Yr Savings 2011 (Gross - At Gen)	66,065,525				
kWh/Yr Savings 2011(At Site)	61,759,587				
Total Expenditures	\$ 8,510,059				
Incentives Paid	\$ 6,405,604				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	2.439	2.218	5.043	1.102	2.088
Levelized Cost (\$/kWh)	\$ 0.0368	\$ 0.0368	\$ 0.0162		
Lifecycle Revenue Impact (\$/kWh)	\$(0.00001466)				
Discounted Participant Payback (Years)	4.27				

Energy engineering for customer projects, supporting both projects with 2011 reported savings and projects that will generate savings in future periods, accounted for approximately \$1,402,500 of the total program expenditures. Energy engineering is performed by third party firms with professional services contracts in place with the Company. In 2011, Rocky Mountain Power had contracts with 24 firms (several with multiple office locations) to deliver these services in Utah and throughout the Company service area. Details of 2011 savings by type of measure are provided on the following table:

**Table 19: Energy FinAnswer kWh Savings by Measure Type**

<b>Measure Group</b>	<b># of Projects</b>	<b>kWh/Yr. Savings (At Site)</b>	<b>% of kWh Savings</b>
Additional Measures	15	29,122,993	47.2%
Building Shell	32	694,540	1.1%
Compressed Air	20	4,645,846	7.5%
Controls	5	492,599	0.8%
HVAC	78	14,939,319	24.2%
Lighting	53	5,939,401	9.6%
Motors	38	2,728,164	4.4%
Refrigeration	35	3,196,725	5.2%
<b>Total</b>	<b>276</b>	<b>61,759,587</b>	

### **Major Trends and Activities**

A total of 276 Energy FinAnswer projects were completed in 2011 compared to 239 in 2010. Program specific energy savings increased by approximately 22 percent compared to 2010, while program expenditures increased 10 percent.

During 2011, program information was provided at several energy efficiency events throughout the state. In addition, program marketing was also promoted through the Company's customer and community managers.

### **Cost Effectiveness**

The program was cost effective from all perspectives. Appendix 1 provides inputs used in the cost effectiveness analysis of this program as well as the measure group cost effectiveness results. The appendix also provides more details on the reporting of kWh savings. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

### **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>.

**Plans for 2012**

The Company will continue to monitor actual and forecasted participation and assess the possible introduction of program modifications. Plans to provide outreach to ensure energy engineering firms providing program services are fully incorporating the impacts for projects required to meet the new code.



## FinAnswer Express (Schedule 115)

The FinAnswer Express program is available to Utah business customers who receive electric service on an eligible general service rate schedule. The program is designed to help customers improve the efficiency of their new or replacement lighting, HVAC, and other equipment by providing prescriptive or pre-defined incentives for the most common efficiency measures. The program is designed to operate in conjunction with the Energy FinAnswer program. Although incentives available may vary, the FinAnswer Express program provides incentives for both new construction and retrofit projects.

The program is marketed through a combination of local trade allies who receive support from the Company, program advertising and other company outreach efforts, word of mouth, and through referrals between other business customer programs.

The summary program results are provided in the following table:

**Table 20: FinAnswer Express Program Performance**

kWh/Yr Savings 2011 (Gross - At Gen)	42,988,710				
kWh/Yr Savings 2011 (At Site)	39,625,517				
Total Expenditures	\$ 5,866,759				
Incentives Paid	\$ 3,495,509				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	1.893	1.721	3.670	1.092	1.638
Levelized Cost (\$/kWh)	\$ 0.0459	\$ 0.0459	\$ 0.0215		
Lifecycle Revenue Impact (\$/kWh)	\$(0.00000670)				
Discounted Participant Payback (Years)	6.22				

Details of 2011 savings by type of measure are provided on the following table:

**Table 21: FinAnswer Express kWh Savings by Measure Type**

Measure Group	# of Projects	kWh/ Yr. Savings (At Site)	% of kWh Savings
HVAC	179	2,658,412	6.7%
Building Shell	150	386,771	1.0%
Lighting	811	35,987,528	90.8%
Motors	12	99,777	0.3%
Refrigeration	74	491,738	1.2%
Other	1	1,290	0.0%
<b>Total</b>	<b>1,227</b>	<b>39,625,516</b>	

## Major Trends and Activities

In 2011, project counts and energy savings results increased over the prior year. The Energy FinAnswer and FinAnswer Express programs operate as complementary programs for commercial and industrial customers and despite downward economic pressures, the combined 2011 kWh savings from Energy FinAnswer and FinAnswer Express increased 10 percent compared to the prior year. As the economy began to recover, more new construction projects were identified and introduced to the program which is a contrast from the several previous years of economic sluggishness. Many of these projects were a result of federal stimulus funds, a trend which will not be persistent. In addition, retrofit projects increased in number due to companies putting off repairs during the economic downturn.

Each year, a training event is held for trade allies working with the FinAnswer Express program. In 2011, the event was held on February 22, in Sandy, Utah at the South Towne Exposition Center. The event was attended by over 250 trade allies and customers and provided information about program updates and changes, recognized outstanding trade allies, and provided technology specific training in targeted breakout sessions. The event also featured a vendor exhibit area with 26 exhibitors where vendors were able to connect with allies and end-use customers. Customers were invited to attend a workshop session and to visit the exhibit area.

A dedicated team of technical and outreach specialists supported trade allies throughout the year by conducting on-site program trainings, responding to inquiries from customers and trade allies, and publishing a quarterly educational newsletter. The team also regularly interfaces with manufacturers and distributors of qualifying products to educate and train local dealers, contractors, and service technicians about the benefits of the program to them and their customers.

In 2011, the Company added content to the web page specifically for trade allies at [www.rockymountainpower.net/alliance](http://www.rockymountainpower.net/alliance). This page includes service area maps, a link to program information, announcements for upcoming events, resources (e.g. the current Light Emitting Diode policy), and current and past newsletters. Of special note in 2011 was the addition of a T12 information flyer for allies to provide to their customers on the pending 2012, federal standards change with linear fluorescent lamps and to help promote lighting upgrades with appropriate accurate information. This information is also contained on a customer facing page at [www.rockymountainpower.net/lightingstandards](http://www.rockymountainpower.net/lightingstandards).

Development began for a new web portal that will allow login access for approved trade allies to program specific information and materials.

Program information was provided at several energy-efficiency-focused events throughout the state. In addition, program information was delivered based on referrals from other programs, the Company's advertising efforts, marketing by Company project managers, customer and community managers, and on-going sales efforts by installation contractors and vendors of high-efficiency equipment.

Some of the Company's program paid advertising in 2011 also focused on the topic of upgrading linear fluorescent lighting. The goal is to encourage customers to upgrade now rather than wait until after the standards change. By upgrading ahead of the standards change, customers can start saving money on their electric bills sooner and benefit from better lighting.

The Company's project management staff continued outreach and provided technical services and FinAnswer Express incentives for customer energy efficiency projects.

### **Cost Effectiveness**

The program was cost effective from all perspectives. Appendix 1 provides inputs and assumptions used in the cost effectiveness analysis of this program as well as the measure group cost effectiveness results. The appendix also provides a description of kWh savings estimates and tools used to support program implementation and reporting. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

### **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>.

### **Plans for 2012**

The Company will propose new measures and measure categories changes to align with codes, standards and third party specifications. Monitor actual and forecasted participation and assess the possible introduction of program modifications. Further develop the trade-ally specific website to provide additional targeted information to trade allies, including information that could be accessed by approved allies upon login. Upgrade from vendor lists posted on the website to a Find a Vendor/Contractor web page for customers to use to find participating vendors based on search criteria. Continue to build and expand relationships with key members of the HVAC, lighting and motors to continue to make the business case for energy efficiency equipment.

## Re-Commissioning (Schedule 126)

The Re-Commissioning program is designed to help owners target electric savings that can be achieved through a systematic tune-up of existing equipment (i.e., measures that deliver savings through no or low-cost improvements). The focus is on restoring building operations to their original design intent. The program trains and utilizes Re-Commissioning Service Providers (“RSP”) to assist customers with their projects.

To maintain program cost-effectiveness, qualifying projects are screened based on electrical usage, building size, type and function, the existing capabilities of building control systems, and the owner’s commitment to implement the operational efficiencies identified. If the owner does not implement the operational efficiencies identified through the collaborative process, repayment of some or all of the direct costs of the Re-Commissioning analysis may be required.

This program operates and is marketed in conjunction with the Energy FinAnswer, FinAnswer Express and Self-Direction programs. Projects or measures that do not meet the criteria for the Re-Commissioning program, (i.e. require a capital equipment investment) are referred to one of the other business programs. Conversely, operations and maintenance or tune-up type measures identified in the capital equipment programs are referred to the Re-Commissioning program for services. RSPs are also encouraged to market the program, but most of the leads to date are coming from other channels.

The summary program results for 2011 are provided in the following table:

**Table 22: Recommissioning Program Performance**

kWh/Yr Savings 2011 (Gross - At Gen)	3,851,039				
kWh/Yr Savings 2011 (At Site)	3,520,821				
Total Expenditures	\$ 367,156				
Incentives Paid	\$ 4,112				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	5.010	4.550	5.200	1.170	24.270
Levelized Cost (\$/kWh)	\$ 0.0230	\$ 0.0230	\$ 0.0202		
Lifecycle Revenue Impact (\$/kWh)	\$(0.00000181)				
Discounted Participant Payback (Years)	0.25				

### Major Trends and Activities

The Re-Commissioning Program experienced a 51 percent decrease in kWh savings in 2011, compared to 2010. Project participation decreased from 14 to 4 projects and program expenditures decreased 63 percent. The Company issued a Request for Information (“RFI”) in 2011 to explore program redesigns that would improve program performance. Information from that RFI was utilized for the development and release of a Request for Proposals, seeking

assistance in both the redesign of the Re-Commissioning program and how best to integrate it into the Company's broader business program platform. Redesign work is anticipated for completion in late 2012, with implementation through a Request for Proposal in late 2013. Program administration is planned to move away for third party administrator for the duration of redesign efforts by the Company.

### **Cost Effectiveness**

The program is cost effective on all tests. Appendix 1 provides inputs and assumptions used in the cost effectiveness analysis of this program, as well as a description of the calculation of reported kWh savings. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

### **Program Evaluation**

See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>.

### **Plans for 2012**

On-going project development and completion

## Self Direction (Schedule 192)

The Self Direction credit program is available to Utah business customers who meet minimum usage requirements of 5,000,000 kWh per year or have a peak load of at least 1,000 kW in the prior 12 months. Customers are responsible for funding and providing the energy engineering work necessary to document the energy savings. This program is designed to provide another option for business customers who have projects similar to those qualifying for incentives from the Energy FinAnswer or FinAnswer Express programs. Incentives are provided in the form of credits used to offset the Schedule 193 DSM tariff rider charge appearing on the monthly bill and are available for both new construction and retrofit projects. In addition, there is a provision for customers with no cost effective projects at their location to qualify for a credit that may be used to offset a portion of their monthly charge.

The program is primarily marketed through customer and community managers and by referral between other programs for business customers. In addition, a few energy engineers market their services to large customers who may be interested in participating.

The summary program results for 2011 are provided in the following table:

**Table 23: Self Direction Program Performance**

kWh/Yr Savings 2011 (Gross - At Gen)	17,522,739				
kWh/Yr Savings 2011 (At Site)	16,447,781				
Expenditures (Does not include Credits)	\$ 369,079				
Self Direction Credits Paid in 2011	\$ 2,473,904				
Total Program Expenditures	\$ 2,842,983				
	PTRC	TRC	UCT	RIM	PCT
Program Cost Effectiveness	2.492	2.266	2.438	0.907	2.504
Levelized Cost (\$/kWh)	\$ 0.0352	\$ 0.0352	\$ 0.0327		
Lifecycle Revenue Impact (\$/kWh)	\$ 0.00000426				
Discounted Participant Payback (Years)	1.13				

### Major Trends and Activities

Thirty-three projects were completed (projects eligible for 80 percent credits) and approved by the Self-Direction Credit Program Administrator in 2011, a 38 percent increase from 2010 with a 4 percent decrease of kWh savings. Participation remains strong from customers who have previously participated in Self Direct program. Credit utilization remains steady in 2011. Increased customer awareness combined with customers who have previously participated has resulted in an overall increase in developing new projects.

The annual Self Direction Administrator report for 2010 and 2011 is attached as Appendix 3 and 4 to this report.

## **Cost Effectiveness**

The program is cost effective from all perspectives. Appendix 1 provides inputs and assumptions used in the cost effectiveness analysis of this program. The appendix also provides an explanation of kWh savings estimation and reporting. Reported savings for the program utilize ex-ante savings for 2011, with deemed savings adjusted from prior year's evaluation and/or other relevant studies.

## **Program Evaluation**

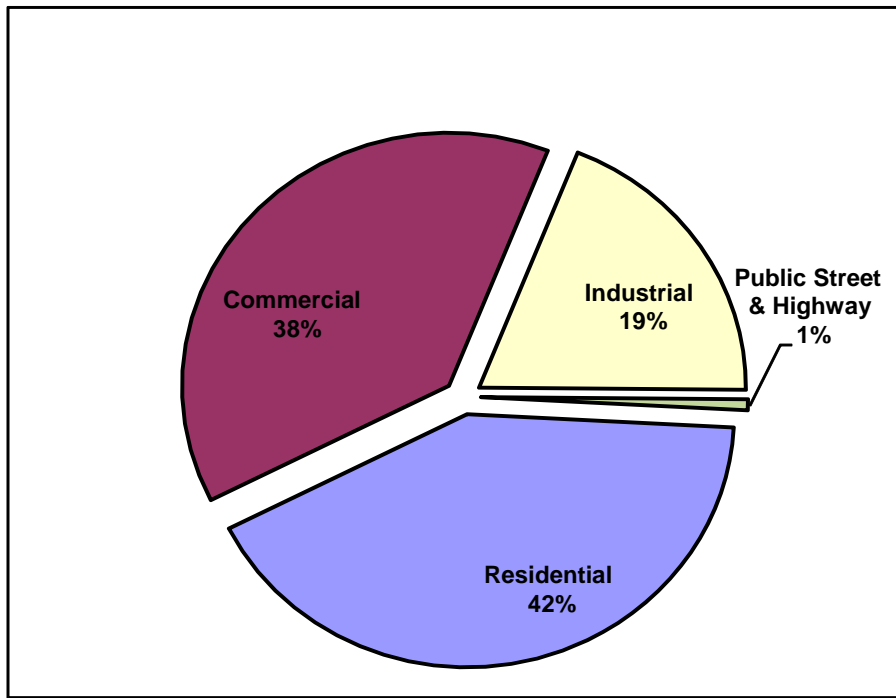
See comments under the Program Evaluation Timeline heading in the 2011 Performance and Activities section of this report for evaluation activities related to this program. Results of program evaluations will be available on PacifiCorp's website at <http://www.pacificorp.com/es/dsm/utah.html>

## **Plans for 2012**

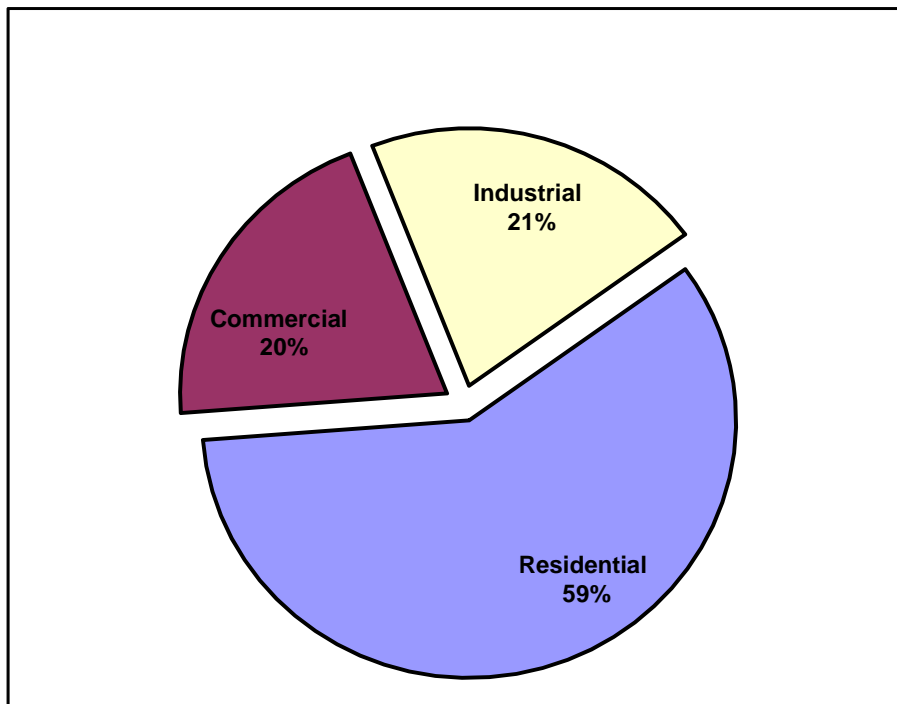
The Company plans to continue program marketing through customer and community managers and by referral between other programs available for business customers, primarily Energy FinAnswer and FinAnswer Express. In addition, energy engineers offer their services directly to eligible customers who may be interested in participating. To support this effort, the Company will work with the DSM Advisory Group to remove the sunset date from the tariff.

# Summary of 2011 Total Portfolio Results

**Table 24: Revenues (Schedule 193) by Customer Type**



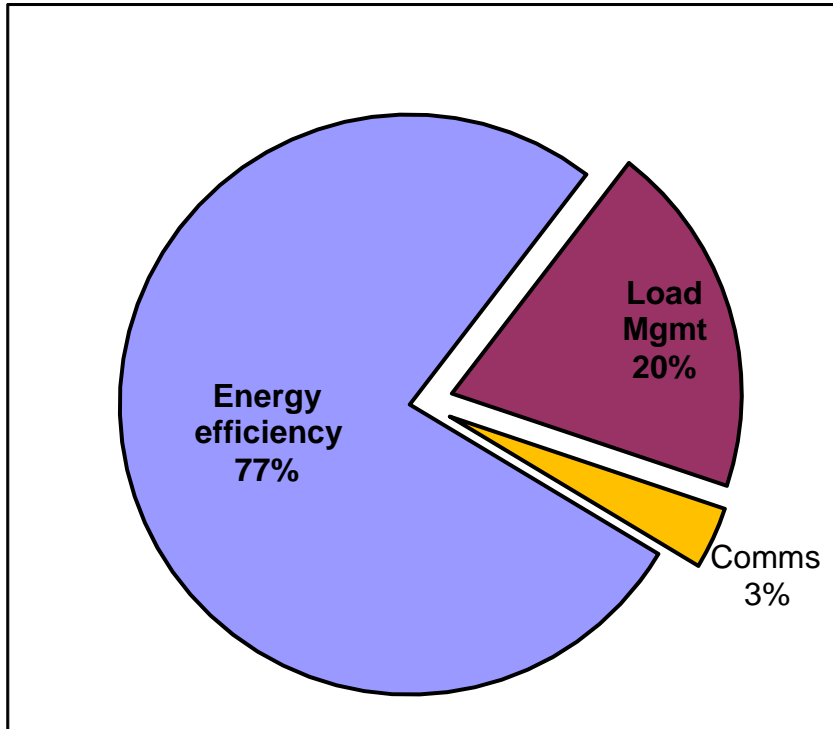
**Table 25: Expenditures (Schedule 193) by Customer Type**



(Note – Table 25 does not include Self Direction Participation Credits but includes Load Management (Cool Keeper for residential and Irrigation Load Control for industrial), Outreach and Communications and Power Forward expenditures as residential costs).

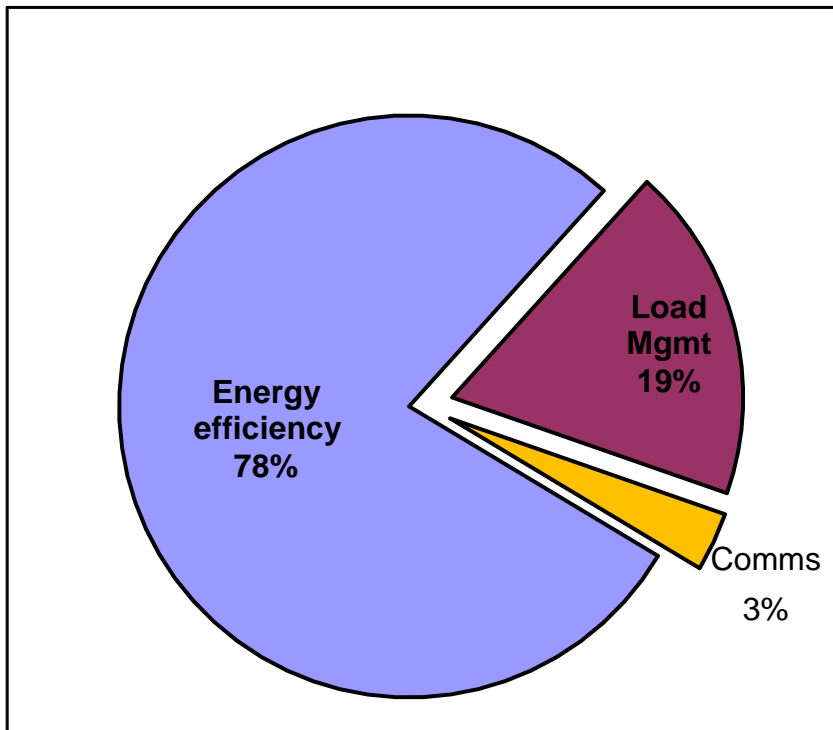


**Table 26: Schedule 193 Expenditures by Type of Program**



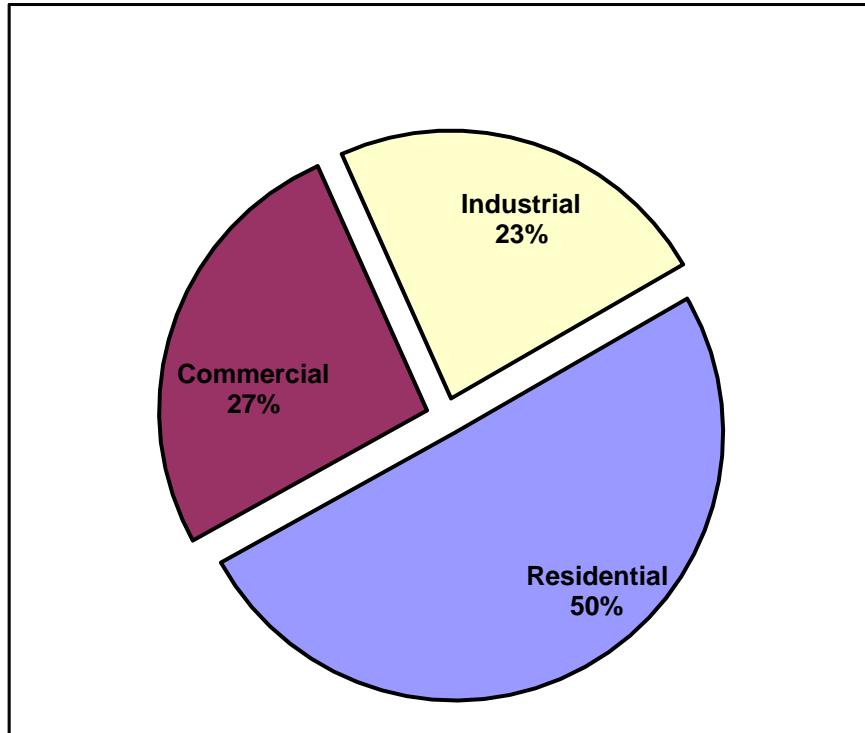
(Note – Table 26 does not include Self Direction Credits)

**Table 27: Total Expenditures by Type of Program**

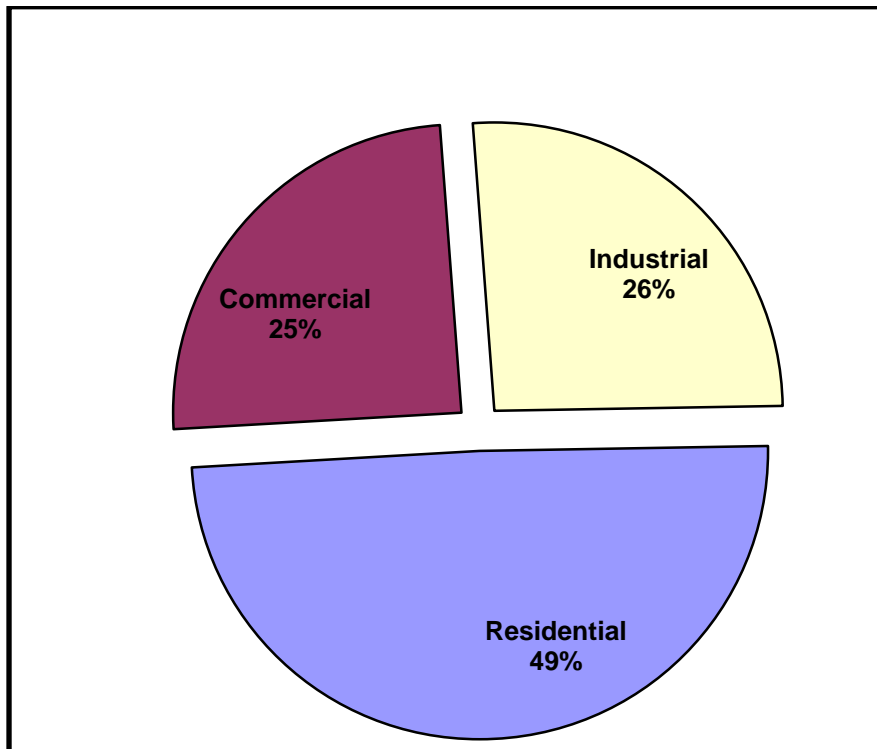


(Note – Table 27 includes Schedule 193 expenditures and Self Direction Credits)

**Table 28: Energy Efficiency Expenditures by Customer Type**



**Table 29: Energy Efficiency kWh Saved by Customer Type**



## Balancing Account Summary

Energy efficiency and peak reduction activities are funded by revenue collected through the Demand-side Management Cost Adjustment tariff rider, which is administered through Schedule 193. Expenditures are charged as incurred. The balancing account is the mechanism used for managing the revenue collected and expenses incurred in the provision of energy efficiency and peak reduction resources. The balancing account activity for 2011 is outlined in the following table:

**Table 30: Balancing Account Summary**

Accumulated Balance as of 12/31/2010 \$ 2,166,272								
	Monthly Program	Accrued	Carrying		Cash Basis	Accrual Based	Accumulated	
	Costs - Fixed	Program	Rate Recovery	Charge	Accumulated	Accumulated	AFUDC	
	Assets	Costs			Balance	Balance	Rate	Balance Total
								Carrying Costs
January	1,242,098		(4,838,501)	2,383	(1,427,747)		7.31%	5,002,324
February	3,500,996		(4,052,860)	(11,031)	(1,990,642)		7.31%	4,991,293
March	3,926,485		(3,830,704)	(12,579)	(1,907,440)		7.31%	4,978,714
April	2,917,927		(3,650,425)	(14,722)	(2,654,660)		7.31%	4,963,992
May	2,570,140		(3,771,287)	(21,078)	(3,876,885)		7.31%	4,942,914
June	2,877,569		(4,218,955)	(29,446)	(5,247,717)		7.31%	4,913,468
July	3,486,859		(5,224,555)	(39,605)	(7,025,018)		7.31%	4,873,863
August	4,814,207		(5,915,003)	(49,051)	(8,174,865)		7.31%	4,824,812
September	2,668,819		(5,719,227)	(62,808)	(11,288,081)		7.31%	4,762,004
October	3,564,450		(4,397,907)	(75,789)	(12,197,328)		7.31%	4,686,215
November	4,749,665		(4,007,384)	(53,081)	(11,508,127)		7.31%	4,633,134
December	7,319,716	3,865,060.19	(4,520,687)	(61,578)	(8,770,676)	(4,905,616.16)	7.31%	4,571,556
<b>2011 totals</b>	<b>43,638,930</b>		<b>(54,147,494)</b>	<b>(428,385)</b>				
Change in cash basis balancing account in 2011 \$ (10,936,949)								

### Column Explanations:

Monthly Program Costs – Fixed Assets: Monthly expenditures for all DSM program activities.

Accrued Program Costs: Program costs incurred during the period not yet posted.

Rate Recovery: Revenue collected through Schedule 193, DSM tariff rider.

Carrying Charge: Monthly carrying charge based on “Accumulated Balance” of the account.

Accumulated Balance: Current balance of the account; a running total of account activities. If more is collected in “Revenue” than is spent for a given month, the “Accumulated Balance” will be increased by the net amount. A negative accumulative balance means cumulative revenue exceeds cumulative expenditures; positive accumulative balance means cumulative expenditures exceed cumulative revenue.

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

AFUDC Rate: The carrying charge rate applied to the accumulated balance. AFUDC means Allowance for Funds Used During Construction.

Accumulated Balance Total Carrying Costs: Total net carrying charges paid on the account since inception of the balancing account.

On November 23, 2011, Rocky Mountain Power submitted Tariff Advice No. 11-13 proposing a reduction to the Schedule 193 tariff surcharge, subsequently assigned to Docket No. 11-035-T14. The Company proposed to reduce the surcharge collection rate applied to customer bills from the currently effective 3.6 percent to 2.4 percent; the proposed reduction would have reduced annual surcharge collections from \$62.6 million at the current rate to \$41.5 million. On December 1, 2011, external parties intervened to which the Company and those intervening parties later stipulated an agreement that set the surcharge collection rate to 3.2 percent, a level which will collect approximately \$54.2 million annually.

The over-collected balance at the end of 2011 was \$4.9 million which includes the accrued cost. The stipulated agreement referenced above also provided for the over-collected balance as of February 1, 2012, to be returned to customers over a one year period. As of January 31, 2012, the over-collected balance was \$6.7 million. Through a separate filing, Rocky Mountain Power will propose to return this amount to customers, through Electric Service Schedule 194, as a 0.4% bill credit for a one year period beginning June 1, 2012.

# Cost Effectiveness

## Introduction

The cost effectiveness of individual programs operated by the Company for 2011 are calculated using actual expenditures and reported savings. Cost-effectiveness is provided at the individual program, load management portfolio, residential energy efficiency portfolio, non-residential energy efficiency portfolio, combined energy efficiency portfolio, and overall demand-side management program portfolio levels. Deemed savings estimates, where applicable, were the same as those used in the planning estimates, unless more recent estimates were available from evaluations.

Energy savings shown in this report are gross savings and the impact of line losses is indicated with an “at site” or “at generation” designation. Line losses are based on the Company’s 2007 line loss study. Net-to-gross assumptions are consistent with planning estimates and/or program evaluations. The energy savings attributed to each program are shaped according to specific end-use savings (the hourly calculation of when energy is used for the various end-use measures from which the savings are derived). Program costs and the value of the energy savings are then compared on a present value basis with the Company’s 2011 Integrated Resource Plan (“IRP”) calculated decrement values for demand-side resource savings and avoided capacity investments. The energy efficiency resource decrement values are fully shaped to represent the 8,760 hourly values that exist within a calendar year. By matching the hourly savings with the hourly avoided costs, both energy and capacity impacts of energy efficiency savings are recognized.

The cost/benefit analysis of the load management programs are based on the avoided value of peak or capacity investments. For purposes of calculating program cost-effectiveness, no energy savings are included for the load management programs, only a shift of when the energy is used away from the peak load hours. The five California Standard Practice Manual cost effectiveness tests were utilized in the cost benefit analysis for both energy efficiency and load management programs.

### **Key Assumptions for Cost Effectiveness Calculations:**

Cost effectiveness calculations for programs and measures (or measure groups) within each program will be detailed below.

Global assumptions used in all cost effectiveness calculations include:

#### **Key Assumptions for All Cost Effectiveness Studies:**

<b><u>Assumption</u></b>	<b><u>Value</u></b>	<b><u>Source</u></b>
Discount Rate	7.17%	2011 IRP
Line Losses (Utah Specific)		
Residential	9.845%	2007 MAC Line Loss Study
Commercial	9.379%	2007 MAC Line Loss Study
Industrial	5.726%	2007 MAC Line Loss Study

Key elements that go into the cost effectiveness calculation for each program include:

- KW/kWh Savings at Gross
- Administrative expenses
- Incentives paid
- Total utility costs – including administration and evaluation
- Gross customer costs
- Net To Gross ratio
- Measure life
- IRP decrement value

The total portfolio and component sectors were all cost effective on a UCT and TRC basis. Only the Non-residential and Peak Reduction portfolios generated RIM test results greater than 1.0. Please refer to the Cost Effectiveness Appendix 1 to this report for more information on the cost effectiveness tests and the assumptions and inputs.

## **Appendices:**

- Appendix 1 – Cost Effectiveness Details
- Appendix 2 - Explanation of Capacity Estimates
- Appendix 3 - Annual Self Direction Administrator Report for 2010
- Appendix 4 - Annual Self Direction Administrator Report for 2011