PNM
Energy Efficiency Program

2013
Annual Report

Public Service Company of New Mexico (PNM)

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Introduction

PNM submits this annual report on the performance of the PNM Energy Efficiency and Load Management Program for calendar year 2013 ("2013 Program"). This annual report relies on the independent evaluator measurement and verification report ("M&V Report") which is submitted as a separate document: "Evaluation of 2013 Public Service Company of New Mexico Energy Efficiency & Demand Response Portfolio", prepared by ADM Associates, Inc. ("ADM").

The programs evaluated in this annual report include programs that were approved by the New Mexico Public Regulation Commission ("NMPRC" or "Commission") on June 23, 2011 in the Final Order Partially Adopting Recommended Decision in Case No. 10-00280-UT and on November 6, 2013 in the Final Order Partially Adopting Recommended Decision in Case No. 12-00317-UT. This report covers all costs incurred in the implementation of the programs and all customer participation in the programs from January 1, 2013 through December 31, 2013.

The following programs are included in this annual report:

(1) Residential Lighting: Customers receive instant discounts on compact fluorescent light bulbs ("CFLs") and Light Emitting Diode bulbs ("LEDs") purchased at 180 participating retail outlets.

(2) Refrigerator Recycling: Residential and commercial customers receive a rebate for recycling a qualifying refrigerator or freezer. PNM provides free pick-up and recycles more than 95 percent of the materials at an Albuquerque recycling center established specifically for this program.

(3) Community CFL: PNM distributed CFLs at various community events. In addition, PNM partnered directly with community groups in Silver City and Santa Fe to distribute CFLs.

(4) ENERGY STAR Home: Homebuilders received incentives for every home they built to ENERGY STAR standards, which are at least 15 percent more efficient than standard homes.

(5) Refrigerator Replacement and CFL Installation: Income-qualified customers receive new ENERGY STAR® qualified refrigerators and CFLs installed by a contractor. New Mexico Mortgage Finance Authority ("MFA") administers this program as part of their New Mexico Energy $mart program.

(6) Easy Savings Kit: PNM low-income customers receive a kit that contains an assortment of energy efficient light bulbs of their choice of various wattages, a low-flow showerhead and other items including educational information on low-cost ways to save energy. Customers were able to enroll by mail or by returning prepaid cards distributed at PNM Good Neighbor Fund events.

(7) Commercial Comprehensive: This flagship program for non-residential customers is comprised of three components. The New Construction component offers incentives

for completing new construction projects that are more energy efficient than what is required by New Mexico building code; the Retrofit Rebate component allows customers to select options from a menu and receive a specific rebate per unit, or they can propose a system improvement that is not included on the pre-set menu and that delivers verifiable savings; and the small business or QuickSaver™ component provides small business customers (less than 100 kW demand) with an attractive, low-cost option for directly installing energy saving measures.

(8) The Power Saver load management program controls refrigerated air conditioning units in participating homes and small businesses during periods of peak demand. PNM typically "dispatches" the Power Saver program during the hottest days of the year. Power Saver participants are paid an annual incentive per unit that is controlled.

(9) The Peak Saver load management program is designed to help large commercial customers reduce the amount of energy they require during peak demand periods. As with the Power Saver program, PNM typically "dispatches" the Peak Saver program during the hottest days of the year. Peak Saver participants are paid an annual incentive based on the amount of peak demand managed by the program.

(10) Market Transformation: This program promotes the adoption of energy efficient products and services, with the goal of inducing lasting behavioral changes in the marketplace. The program funds educational and community outreach activities and broad-based energy efficiency promotional efforts.

(11) Self-Direct: This program allows large customers (with energy usage greater than seven million kWh per year) to receive credits for energy efficiency improvements made at its facilities. Credits for approved self-direct programs may be used to offset up to seventy percent of the energy efficiency tariff rider.

New Programs Approved November 2013

The following programs were approved by the Commission on November 6, 2013. They are included in this report since there was implementation activity conducted in December of 2013; however, these programs were not yet available for customer participation at the end of 2013 and so there were no customer participation costs or savings to include in this report.

(12) Whole House: Home owners and renters receive a home energy assessment conducted by a trained home assessor, direct installation of CFLs, programmable thermostat, low-flow showerheads and faucet aerators. Upon completion of a home assessment, participants would be eligible for rebates of between $75 and $500 for replacement of older HVAC units, refrigerators, dishwashers, clothes washers, and advanced evaporative coolers. Participant cost is $40.

(13) Low-Income Home Efficiency: Similar to the Whole House program but for low-income customers. Participants receive a free home energy assessment, free direct

installation of CFLs, programmable thermostat, low-flow showerheads and faucet aerators, and free replacement of their primary refrigerator if the unit qualifies. The rebate forms provided as part of the Whole House Program will also be provided to interested participants.

(14) Residential Stay Cool: Customers will have access to mail-in rebates for the purchase of solid-media, advanced evaporative cooling units, ENERGY STAR qualified room AC units, high SEER (14 and above) central AC units and ENERGY STAR variable speed pool pumps.

(15) Student Efficiency Kits: Home efficiency and energy education kits will be provided to fifth grade teachers to send home with their students. Training and energy curriculum will also be provided for the teachers. The kits contain CFLs, a low-flow showerhead and other items.

(16) Home Energy Reports: Multiple reports per year will be sent to targeted residential customers comparing their energy usage statistics to average usage along with recommendations and education about energy efficiency opportunities.

Program Results Summary

This is the sixth annual report on the PNM Energy Efficiency Program. Results are based upon independent measurement and verification. The following is a short summary of the overall results:

- The 2013 Program was cost effective as measured by the Total Resource Cost ratio ("TRC"). The TRC for the portfolio of programs was 1.91[1].
- The total annual net savings after free rider and other adjustments was 75.6 GWh at the customer meter or 80.9 GWh at the generator.
- The load management programs were successful in recruiting customer participants, with total capacity under the programs of about 62 MW.
- Total program expenses were about $18.1M.
- The average cost per kWh of lifetime energy savings from the energy efficiency programs, not including Load Management, was 1.5¢/kWh.

Table 1 shows the total number of customer participants, the annual energy and demand savings, the lifetime energy savings, and the total costs for each of the programs for calendar year 2013. An identical table can be found on page A-1 of the M&V Report (not including year-end expenses for newly approved programs – see note below Table 1).

[1] Programs included in the 2013 Annual Report were approved by the Commission based on being cost-effective using the total resource cost (TRC) test. Amendments to the Efficient Use of Energy Act in 2013 changed the cost-effectiveness criteria to the utility cost test (UCT). Cost effectiveness of future programs proposed to the Commission will be based on the UCT.

Table 1 – Results Summary

Program[1]	Participants or Units	Annual Savings (kWh)	Annual Savings (kW)	Lifetime Savings (kWh)	Total Program Costs
Refrigerator Recycling	8,588	7,071,954	1,209	34,380,783	$ 1,410,722
Residential Lighting	1,061,080	26,338,540	3,219	184,369,782	$ 1,793,409
Energy Star Homes	140	162,860	117	4,885,800	$ 203,536
Community CFL	5,856	109,542	13	766,796	$ 21,228
Commercial Comprehensive	1,009	38,022,323	7,048	439,348,303	$ 5,814,315
Easy Savings	6,761	1,616,433	151	12,464,655	$ 395,355
Refrigerator & CFL Replacement	4,952	363,574	59	4,781,032	$ 205,431
Large Customer Self-Direct	3	150,571	17	2,258,565	$ -
PNM Power Saver	39,046	724,764	43,240	724,764	$ 5,667,971
PNM Peak Saver	111	1,001,290	19,142	1,001,290	$ 2,151,043
Market Transformation	NA	NA	NA	NA	$ 99,739
Home Energy Reports (New)	NA	NA	NA	NA	$ 41,491
Residential Stay Cool (New)	NA	NA	NA	NA	$ 44,675
Student Efficiency Kits (New)	NA	NA	NA	NA	$ 32,165
Whole House (New)	NA	NA	NA	NA	$ 106,332
LI Home Efficiency (New)	NA	NA	NA	NA	$ 117,704
Total	1,127,546	75,561,851	74,213	684,981,770	$18,105,116

1. New programs approved on November 6, 2013 in Case No. 12-00317-UT did not have customer participation in 2013. The costs shown for new programs are initial implementation costs incurred at the end of 2013.

Table 2 shows the net present values of the lifetime energy savings and program costs. The utility profit incentive amounts are also shown[2]. The ratio of the benefits to the costs is the total resource cost ratio or TRC, which is presented before and after including the cost of the profit incentive.

[2] The method for calculating the profit incentive was changed by the Commission in the Final Order in Case 12-00317-UT, effective December 2013. The profit incentive shown in Table 2 is prorated based on 11 months using the previous method and 1 month using the new method.

Table 2 – Program Benefits and Costs

Program[1]	Profit Incentive	NPV of Economic Benefits	NPV of Program Costs	NPV of Program Costs & Profit	TRC (Benefit-Cost Ratio)	TRC w/ Profit Incentive
Refrigerator Recycling	$ 80,812	$ 1,281,087	$ 1,043,425	$ 1,118,113	1.23	1.15
Residential Lighting	$ 384,833	$ 5,875,533	$ 2,488,605	$ 2,844,273	2.36	2.07
Energy Star Homes	$ 11,302	$ 593,538	$ 531,672	$ 542,117	1.12	1.09
Community CFL	$ 1,685	$ 23,960	$ 19,619	$ 21,176	1.22	1.13
Commercial Comprehensive	$ 924,520	$16,849,740	$ 7,491,991	$ 8,346,446	2.25	2.02
Easy Savings	$ 27,508	$ 568,672	$ 209,177	$ 234,600	2.72	2.42
Refrigerator & CFL Replacement	$ 10,897	$ 165,832	$ 143,420	$ 153,491	1.16	1.08
Large Customer Self-Direct	$ -	$ -	$ -	$ -		
PNM Power Saver	$ 195,866	$ 5,020,174	$ 3,787,847	$ 3,968,869	1.33	1.26
PNM Peak Saver	$ 85,775	$ 2,271,927	$ 1,280,373	$ 1,359,647	1.77	1.67
Market Transformation	$ 632	$ -	$ 92,180	$ 92,764		
Home Energy Reports (New)	$ 263	NA	NA	NA	NA	NA
Residential Stay Cool (New)	$ 283	NA	NA	NA	NA	NA
Student Efficiency Kits (New)	$ 204	NA	NA	NA	NA	NA
Whole House (New)	$ 673	NA	NA	NA	NA	NA
LI Home Efficiency (New)	$ 745	NA	NA	NA	NA	NA
Total	$1,725,996	$32,650,463	$17,088,310	$18,681,496	1.91	1.75

1. New programs approved in Case No. 12-00317-UT did not have customer participation in 2013 and will be evaluated for cost-effectiveness in 2014.

Program Information

Residential Lighting

In 2013, the Residential Lighting program exceeded its target with over 1,000,000 CFLs sold through the program. There were a total of 180 participating retail stores in the Residential Lighting program throughout 2013, comprised of 10 different retail chains that offered the markdown rebates and 29 coupon stores. Participating retailers included large home improvement stores, warehouse clubs, discount retailers, drug stores, and independent hardware stores throughout the PNM service territory. The average incentive was $1.12 per CFL. Standard CFLs accounted for 89% of sales through the program, and specialty bulbs comprised 11%. PNM also added LEDs to its Residential Lighting program portfolio in Fall 2013. Discounted LEDs were offered at two participating retail chains with a total of 11 locations.

Each participating retailer displayed point-of-purchase ("POP") materials describing the benefits of CFLs, the different CFL options available and information on the discounts provided by the program. Retailers that offered the LED discount also displayed POP describing the new rebates available on that technology, as well as the benefits of LED lighting. Residential Lighting program field representatives provided participating stores with collateral and point-of-sale materials, organized retailer training sessions and conducted 48 events throughout the year, including several school and community events.

Refrigerator Recycling

JACO Environmental, Inc., the third-party contractor utilized for the Refrigerator Recycling program, continues to operate a recycling center in Albuquerque. The facility disassembles all of the refrigerators and freezers collected through the program. The 8,588 refrigerators and freezers recycled in 2013 prevented the emission of approximately 26,180 metric tons of CO_2 and CO_2 equivalents into the atmosphere[3], in addition to the CO_2 reductions due to energy savings.

ENERGY STAR® Home

A total of 140 homes built in PNM service territory earned the ENERGY STAR qualification in 2013. Although fewer new homes were constructed as part of this program than in previous years, the level of participation achieved was still a notable accomplishment given the fact that builders had to adapt to the more stringent requirements of ENERGY STAR Version 3.0. The additional requirements of building a Version 3.0 home caused many builders to cease constructing ENERGY STAR qualified homes in 2013 and the PNM Energy Star Home program was discontinued at the end of the year because it was no longer cost-effective.

Community CFL

In 2013 PNM distributed 3,856 CFLs at various events and an additional 2,000 CFLs through its partnership with local community groups in Silver City and Santa Fe. At each event, PNM or its partners distributed CFLs and educated customers on the benefits of using CFLs instead of incandescent bulbs. The program served nearly 1,000 customers in various communities.

Easy Savings Kit

In 2013, a total of 6,761 kits were distributed to low-income PNM customers. Approximately 95.6% of these kits were distributed by mail to customers who enrolled after receiving a direct mail postcard that was sent to nearly 25,000 PNM customers who had qualified for the Low Income Home Energy Assistance Program ("LIHEAP") in the prior year and who had not received an Easy Savings Kit in the past. In 2013, PNM also began reaching income-qualified customers through its Good Neighbor Fund events, where low income customers can get assistance with their electric bills. Although PNM did not market this program through community agencies in 2013, 78 kits were attributed to this delivery method.

Refrigerator Replacement and CFL Installation

PNM contracted with the New Mexico Mortgage Finance Authority (MFA) to install CFLs and replace inefficient refrigerators in the homes of income-qualified PNM customers. MFA and its subcontractors installed CFLs and replaced refrigerators as necessary in the homes of 312 PNM customers in 2013 as part of this program.

Commercial Comprehensive

PNM contracted with KEMA Services, Inc. to implement the Commercial Comprehensive energy efficiency program. This program is comprised of three sub-programs, the New Construction program, the Retrofit Rebates program and QuickSaver, the small-business program. The New Construction and Retrofit Rebates programs offer pre-set and custom

[3] EPA Responsible Appliance Disposal (RAD) Program http://www2.epa.gov/rad/environmental-benefits

incentives for installing qualifying equipment in new and existing buildings. Eligible equipment includes energy efficient lighting, HVAC, refrigeration, and motors. In 2013, there were 316 customer projects in the New Construction and Retrofit Rebate programs. The projects completed at these customers' facilities resulted in 26,190,742 of net annual kWh saved and over $2,000,000 in rebates paid.

PNM QuickSaver is a direct install program for small business customers who have an annual peak electric demand of 100 kW or less. It offers business customers pre-set incentives for installing qualifying lighting products and refrigeration in existing buildings. In 2013, the program focused on continuing to train participating contractors for continued and successful program implementation. More than $1,700,000 in incentives was paid on 693 customer projects, which resulted in 11,831,581 of net annual kWh saved.

Market Transformation

The goal of the Market Transformation ("MT") Program is to increase awareness of energy efficiency to induce behavioral changes that result in the adoption of energy efficient measures. In 2013, MT activities continued to focus on outreach across the PNM service territory to help customers better understand how they use energy and how to make better-informed decisions on the ways they can use energy more efficiently. This outreach took a variety of forms, including community events, social media outreach through Facebook and Twitter, maintaining the Kill-A-Watt device program in public libraries and promotional campaigns stressing the benefits of energy efficiency.

Power Saver and Peak Saver Load Management

Peak Saver and Power Saver are the PNM load management programs. PNM customers with annual peak demand of 150 kW or greater can participate in Peak Saver and customers with annual peak demand of less than 150 kW, including residential customers, can participate in Power Saver. The load management programs were successfully utilized to offset the need for peaking resources during the summer of 2013. Appendix B shows the times and durations of the load curtailment events in 2013. PNM dispatched the load management resource 16 times for a total of 64.5 hours. The peak load curtailment amount was 62 MW as determined by ADM. The total PNM system peak load for the year occurred at 5:00 PM MDT on June 27, 2013. As can be seen from Appendix B, the load management programs were dispatched over this time period.

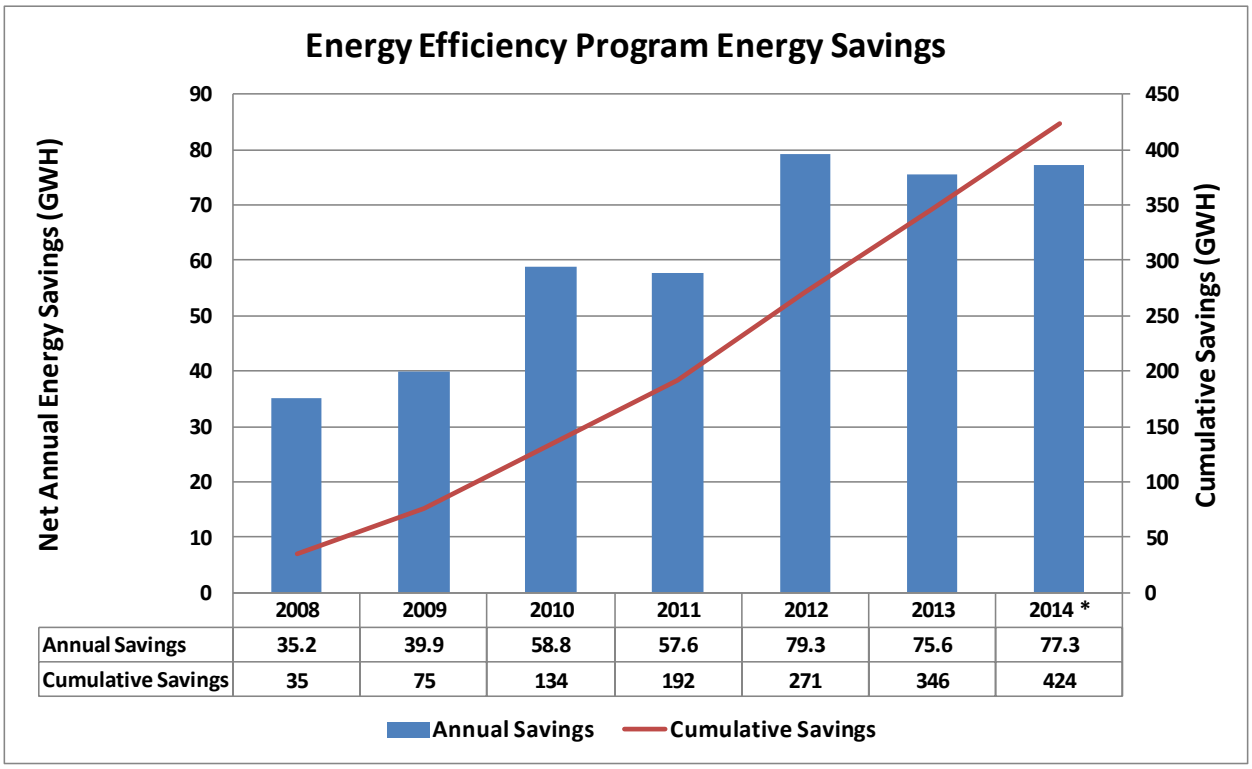
Program Benefits and Goals

The 2013 Program provided numerous benefits to the PNM system, customers, participating customers, the environment and the New Mexico economy. The PNM Energy Efficiency Program, now in its seventh year, is a key resource in the 2011 Integrated Resource Plan ("2011 IRP"). The 2011 IRP examined many different portfolio options that could be implemented to meet expected growth in the demand for electricity from 2011 to 2030. Energy efficiency and load management programs were consistently found to be lower-cost alternatives when compared to meeting system needs with traditional supply-side resources. "The most cost-effective portfolio meets electric system demand, provides acceptable system reliability and

operational flexibility, meets renewable portfolio standards and other regulatory requirements, and minimizes financial cost to the customer."[4]

The most cost-effective portfolio includes the impacts of the 2013 Program and projected growth of the programs that will allow PNM to achieve the minimum energy saving goals specified in the Efficient Use of Energy Act ("Act"). Although the savings projections for each year included in the 2011 IRP vary from the savings in the 2013 Program, the cumulative result for 2014 included in the 2011 IRP is consistent with what is projected in the annual report on the 2013 Program. Figure 1 shows the annual incremental savings, on the left axis, and annual cumulative savings achieved through 2013 and projections through 2014 on the right axis.

Figure 1



Note * - 2014 savings are projected.

The Act requires that PNM achieve cumulative savings equivalent to at least 411 GWH by 2014, based on five percent (5%) of PNM's retail sales in 2005. PNM believes that if customer participation meets the projections assumed in 2014, it will be able to achieve or exceed the minimum savings specified in the Act.

A wide range of customers participated in the 2013 Program. In the Refrigerator Recycling program, 8,588 inefficient refrigerators and freezers were removed from the market. 1,061,080 CFL bulbs were discounted through the Residential Lighting program and more than 8,000 low-income customers benefited from the three low-income programs. 1,009 commercial customers, including over 693 small commercial accounts, participated in the business energy efficiency

[4] "Electric Integrated Resource Plan: 2011 – 2030, July 2011, p. 1.

programs. In addition, over 28,000 residential customers and 4,000 business customers participated in load management programs. Customers who participated in the programs received additional benefits through direct incentives that offset the cost of energy efficient improvements and through lower electric bills. The 2013 Program provided rebates and other incentives valued at more than $7.8 million directly to customers.

The 2013 Program also had a significant impact on the New Mexico economy. Customer incentives are designed to pay between 25 percent and 75 percent of the incremental cost of an efficiency improvement. Using a multiplier factor of three, the economic impact of the customer incentives would be about $23 million dollars. The 2013 Program also had a significant impact on local employment. Most of the PNM programs are implemented by third-party contractors who employ local staff. The 2013 Program directly supported approximately 40 local employees of these third-parties. In addition, much of the $7.8 million in incentives paid to customers supported additional employment by local companies that provided the energy efficiency improvements.

Finally, the energy savings from the 2013 Program will result in a significant reduction in water consumption and CO_2 emissions. Estimated water savings and reductions of CO_2 are shown in Table 7, which can be found on page 23.

Tariff Collections

The costs of implementing the 2013 Program are recovered through the Energy Efficiency Rate Rider No. 16 ("Rider") on customers' bills. The current Rider includes a program cost rate element that is currently assessed monthly as a percentage (2.591%) of the monthly bill charge and a profit incentive rate element also assessed monthly as a percentage (0.196%).

During calendar year 2013, PNM collected a total of $17,860,906 of program costs. Actual program expenses for calendar year 2013 were $18,105,116 and over-collected program costs from 2012 were $1,010,099. PNM also owes $350,623 in carrying charges on the monthly over-collection balances. This resulted in a total over-collection of $1,116,512. PNM has submitted the documentation for a tariff rider adjustment to account for this over-collection, including Advice Notices and supporting testimony, in a separate filing concurrent with this annual report.

Beginning on August 21, 2011 PNM was authorized to earn a utility profit incentive ("Profit Incentive') as approved in NMPRC Case No. 10-00280-UT. The Final Order in Case 12-00317-UT authorized PNM to earn a revised Profit Incentive. PNM has calculated a revised calendar year 2013 Profit Incentive amount based on a prorated application of the Profit Incentive methods approved in the two cases. PNM has submitted the documentation and supporting testimony for the Profit Incentive reconciliation in a separate filing concurrent with this report.

Regulatory Proceedings

On October 5, 2012 PNM filed a new energy efficiency and load management program plan with the Commission (Case No. 12-00317-UT). A hearing was held February 11 – 15, 2013 and the Commission issued a Final Order approving the plan on November 6, 2013. PNM filed an Advice Notice to modify the Energy Efficiency Rider No. 16 which became effective November 25, 2013.

On July 23, 2013 PNM filed a motion to modify the 2013 calendar year budgets for certain programs. The Commission approved the motion in their Order issued on August 7, 2013.[5]

Independent Evaluation

Background and Purpose

The Energy Efficiency Evaluation Committee appointed by the Commission selected ADM as the state-wide independent evaluator and this selection was approved by the Commission on November 8, 2012. The Commission approved the M&V budget and scope of work for a three year term to conduct annual measurement and verification analysis for the years 2013 – 2015. ADM conducted independent evaluation of the 2013 Program and its M&V Report is based on data from January 1, 2013 through December 31, 2013. PNM worked closely with ADM to provide the data necessary to complete the 2013 M&V Report. This included rebate processing and participant files, budget data by program and avoided-cost information.

Summary of Findings and PNM Comments

All of the programs evaluated were found to be cost effective and the total portfolio of programs was found to be cost effective. The results of the M&V analysis will be used to adjust a number of technical assumptions made by PNM regarding program performance, including the average savings per unit and the effective useful life of measures. The M&V Report also contains other findings and recommendations in terms of improving marketing and customer satisfaction of programs. A summary of some of the more important findings and recommendations, along with comment from PNM, is provided below.

Evaluation Summary

After evaluating the high impact programs of the PNM DSM portfolio, ADM concluded that:

- **The programs are mature and established.** PNM and third party implementation staff have largely incorporated evaluation findings into their implementation processes and savings estimates, providing for effectively-delivered programs with reliable savings estimates.

- **Implementation contractors have a firm understanding of the local market conditions.** Third party implementers used by PNM have at this point been engaged for 4 to 5 program years. This length of experience has enabled the implementation contractors to build an understanding of the local market and momentum in their program administration. Particular examples of this include the development of long-standing relationships with New Mexico business customers through the Commercial Comprehensive program, and the participation of a wide swath of both small and large retailers in the Residential Lighting program.

[5]" Order on Unopposed Motion to Re-open Case and to Modify Program Budgets", NMPRC August 7, 2013, Case No. 10-00280-UT.

- **Declining incremental costs and the upcoming shift to the UCT will strain the cost-effectiveness of programs that do not have customer investment.** Traditionally cost-effective programs that do not require customer investment (such as Refrigerator Recycling) show marginal cost-effectiveness under new guidelines.
- **Programs that have not been evaluated in recent years were not updated to reflect new federal codes.** Low Income CFL & Refrigerator Replacement as well as Easy Savings both had low realization due to the Evaluators updating savings to reflect impacts of the Energy Independence and Security Act ("EISA") [which had the effect of lowering the baseline savings assumptions].

Residential Programs

Refrigerator Recycling

ADM Conclusion & Recommendation:

- Refrigerator Recycling and Low Income CFL & Refrigerator Replacement will both be close to failing under the new UCT cost-effectiveness test (with UCT scores of 1.01 and 1.02, respectively). Though Refrigerator Recycling was not evaluated in 2013 (except for cost-effectiveness testing), on the basis of these findings, the Evaluators recommend decreasing the program incentive.

PNM Response:
ADM stated that the program will be marginally cost-effective in the future under the UCT. The cost-effectiveness of the program under the UCT is highly dependent on the avoided costs used in the calculation. To the extent avoided energy and demand cost values change, PNM will adjust the rebate amount accordingly. It should also be noted that in 2011, research respondents expressed a lack of satisfaction with the rebate amount. Low participation rates were also observed; therefore, PNM increased the rebate amount from $30 to $50 and participation increased.

Low Income CFL and Refrigerator Program

ADM Conclusions & Recommendations:

- **The program has very high participant satisfaction.** Program participants responded very positively when asked to rate their satisfaction with the overall process, and found that the installers were courteous and careful with their homes. Further, most respondents were very satisfied with the observed savings on their bill.

- **The program model is constrained and not fully-scalable.** In relying upon MFA's weatherization outreach, this program model does not reach as many homes as needed to obtain economies of scale. Outreach to specifically perform CFL and refrigerator replacement is not cost-effective, and as such the installation of these measures is dependent upon the participants needing weatherization services. PNM cannot derive

savings from these projects as most of their low income customers use evaporative cooling.

- **Program staff have not updated their savings calculations.** The Evaluators found that staff performing the savings calculations for this program were using prior evaluation numbers as the basis for savings. Ordinarily, this is a justifiable approach. However, in 2013 this was found to overestimate savings due to the impact of EISA on CFL baselines as well as the overall savings from refrigerators (for which the unit-specific metered savings in 2013 were lower than in past years).

- **CFL saturation is increasing among low income customers.** Staff at MFA reported that they are finding fewer opportunities for installation of CFLs than in past program years due to increased uptake of CFLs.
- **Report Low Income CFL & Refrigerator Replacement homes to Ecova in 2014.** This serves two purposes. (1), Ecova can be kept apprised of areas where outreach for their new Low Income Home Efficiency Program should be limited and (2), if Ecova finds it justifiable, they can follow up with Low Income CFL & Refrigerator Homes for additional measures. (Ecova is PNM's third-party contractor responsible for implementing the new Whole House and Low Income Home Efficiency programs.)

- **Modify deemed savings based upon 2013 evaluation results.** The findings from the 2013 evaluation better-reflect current market conditions than the last evaluation of this program (which was conducted in 2010).

- **Guide implementers to install a higher lumen output for elderly customers**. Complaints about the quality of CFL lighting were entirely attributable to elderly customers finding the lighting level to be too dim. Installers should be cognizant of this segment's lighting needs and install higher-wattage CFLs than typical to account for this (such as using a 15W when they would normally use a 13W CFL). This would assist in measure retention and acceptance.

PNM Response:
PNM will update the deemed savings assumptions for this program. PNM will work with ECOVA to develop the appropriate strategy when working with past and potential participants in the MFA program. PNM will emphasize the importance of lumen maintenance with MFA when performing lighting retrofits for elderly customers.

Low Income Easy Savings Program

ADM Conclusions & Recommendations:

- **Many customers are still waiting to replace burnt out incandescent bulbs.** 51.5% of survey respondents indicated that they have not installed all six CFLs. Of these, 35.5% are waiting for their incandescent light bulbs to burn out before replacement. These

customers represent delayed savings potential, and the lack of quick installation of CFLs purchased may lead to lower overall installation.

- **There is some available market for a second showerhead.** Fifty-five percent of respondents indicated having more than one shower in their residence. Of those 55.0%, 56.9% stated that they "definitely would have installed" an additional showerhead and 25.0% stated that they "probably would have installed" an additional showerhead if it was included in the kit.

- **Some participants would be responsive to additional CFLs.** Of the 69% of survey respondents that installed all six CFLs received, 89% stated that they "definitely would have installed" two additional CFLs if they were included with the kit.

- **Have marketing materials emphasize the cost of waiting.** It was observed that a fair amount of participants waiting until incandescent bulbs burnt out before installing. Marketing materials should target this issue, with messages on the cost of waiting to show the need for active replacement of incandescent bulbs.

- **Consider a second showerhead for the kit.** Based on the survey findings, the evaluators concluded that a second showerhead could be a cost-effective addition to the kit.

- **Review the Quality Assurance/Quality Control processes.** Two percent of respondents indicated not receiving a showerhead. PNM and RAP (third-party implementer for the Easy Savings Kit program) should review the QA/QC procedures in place at the point of kit assembly in order to determine if there is an assembly issue or if participants are losing delivered equipment.

PNM Response:
The kit does contain language about the cost of waiting to replace the incandescent lamps; however, PNM will explore improved messaging options. PNM will work with the implementer to discuss custom options. PNM will request documentation from the implementer for their QA/QC policy.

PNM Power Saver Demand Response Program

ADM Conclusions:

- **Most of the Medium Commercial Component comprises multifamily housing complexes.** These units are paid at the commercial rate, though the return per-ton is more in line with the residential population.

- **The program is used to a much greater extent than in past program years.** In 2013, there were 16 events called over the summer cooling season, including 13 events in June.

- **ADM noted that both Power Saver and Peak Saver were cost-effective under the TRC. However, ADM observed that to the extent that future programs are evaluated on the UCT, the Power Saver program may fail UCT**.

ADM Recommendations:

- **Adjust geographic labeling conventions.** The program has both a "South" and a "Southern New Mexico" designation. This is an aftereffect of the program's gradual expansion to the southern end of PNM's service territory. It is recommended that the "South" region be aggregated with the "Central" region in order to simplify the population stratification. This could reduce the needed sample size for precision requirements. The cities included in "South" are Belen, Los Lunas and Tijeras, which do not have markedly different weather than Albuquerque.
- **Pay large multifamily housing complexes at the residential rebate rate.** These units are receiving a larger incentive due to the current program structure, though they do not provide a higher return than standard residential facilities.
- **Consider adding a secondary rebate payment in years with a large number of events.** The Power Saver Program has run a much larger number of events since inception. In 2009, only one event was run. This has gradually increased to a total of 16 in 2013. In order to maintain customer satisfaction and an appropriate compensation level for the amount of curtailment asked of customers, PNM should consider an incentive structure that provides more compensation when the program hits a specified number of events.

PNM Response:
PNM and Comverge, the third-party implementer, agree that the consolidation of the "South" region into "Central" will simplify sample design and evaluation without compromising accuracy. PNM is in discussions with Comverge to include multi-family units that are "behind" a single master-meter into the residential segment. PNM does not think that an added incentive is required at this time. Despite the increase in events, the event hours are approximately 60% of the allowed time of interruption. PNM believes that events happening on subsequent days results in more satisfaction issues, than the number of overall events. Moreover, program cost effectiveness would be adversely affected if the cost of incentives increased.

ADM found that both load management programs passed the TRC cost-effectiveness test. However, they also reported that the Power Saver program would not pass the UCT. ADM made the UCT calculation based only on one year's costs and performance. The demand response programs were approved and contracted based on a 10-year life and PNM believes the program will pass both the TRC and the UCT when examined over the remaining life of the program

Commercial Programs

ADM Conclusions & Recommendations:

- **The Commercial Comprehensive Program has very high participant satisfaction.** Program participants responded very positively when asked to rate their satisfaction with various components of the program. Satisfaction was high for all metrics, including incentive amounts, service provided by PNM staff, KEMA (the third-party implementation contractor) staff, and Trade Allies, ease of application processes, and performance of equipment installed.
- **The Commercial Comprehensive Program is showing a slow increase in non-lighting participation.** The Commercial Comprehensive Program has shown gradual increases in non-lighting participation. This year was particularly anomalous in having one large HVAC project account for nearly 40% of non-lighting Retrofit Rebates savings, but even with that factored out, the program is showing increased uptake of non-lighting measures. This will have to be accelerated, however, as the available opportunities for savings from lighting retrofits will decline with the imposition of new standards for linear and compact fluorescent lighting.
- **New Construction and Retro-commissioning Projects will benefit from cross-fuel coordination.** New Mexico Gas Company has a Commercial Solutions program currently implemented by CLEAResult Consulting. In 2013, a first test of cross-fuel coordination was completed in the joint-implementation and incentivizing of a retro-commissioning project. This allowed for higher incentives, reduced implementation costs, and the pursuit of more savings opportunities for this project. This is an avenue that should be pursued and expanded upon in coming program years.
- **Uptake of envelope improvements, food service, and plug load measures has been limited.** These are avenues for deeper savings at several facility types that thus far have seen little to no uptake. [These measures are available in the program but have relatively low participation.]
- **New Construction displays lower participant satisfaction.** The Evaluator noted several interviews where New Construction participants felt dissatisfied with their experience with the program. The pool of possible survey respondents is very limited due to the low participation level of the New Construction component, but the rate of dissatisfaction among these participants was notable. Many indicated a lack of awareness of options for assistance with their program participation, as these participants may not have had the chance to interact with an account manager or other PNM staff. Further, many of the general contractors involved with new construction projects are not PNM Trade Allies and are ill-informed of the program offerings and requirements.
- **Coordinate with El Paso Electric to establish a relationship with their PC Power Management trade ally.** PNM has not had success with this measure, whereas EPE has had a fair amount of interest and uptake as a result of the efforts of a newly-established

trade ally. PNM could attempt to reach out to this trade ally to see if they could be active in northern New Mexico.

- **Develop an upstream component for desktop PCs and servers modeled after the Southwest Public Service Business Computing program.** Elsewhere in New Mexico, the SPS upstream incentives for desktops in business applications have provided significant savings, and the Evaluators believe this to be a duplicable model for PNM.
- **Assess whether compressed air improvements can be introduced into QuickSaver.** Automotive repair facilities accounted for 11.7% of 2013 QuickSaver participation, and automotive repair survey respondents indicated that their compressed air systems were their highest energy load. Many of these facilities are owner-operated and would not have comprehensive system optimization as a standard business practice. Further savings could be had through low-cost measures such as leak assessment and repair or system pressure adjustment.
- **Target marketing to sectors with low diversity of participation.** There are several sectors with end-uses that are not being engaged through the program. The most notable of these include restaurants, K-12 schools, and government facilities. These three facility types have over 95% of their savings in 2013 from lighting, despite a wider range of equipment classes to pursue. Governments and K-12 school districts may require partnership and buy-in from higher level decision-makers, however, as the decision for funding the improvements may not come at the facility-level. The restaurant sector has a wide range of savings opportunities outside of lighting with the large loads from food service and refrigeration equipment. These should be pursued where possible, as this is a large and seemingly relative untapped area for potential savings.

PNM Response

PNM will work with KEMA to develop more means to promote products (such as PC's as mentioned above) via upstream channels. In certain regions nationally, KEMA is utilizing an upstream approach to promote other energy efficient equipment; however, there have been many challenges to overcome as the commercial market is more complicated than the residential market. Specifically, with distributors that have national accounts – the billing systems are centralized; therefore, creating a localized invoicing system applying specific utility incentives is the most significant challenge.

PNM will contact El Paso Electric to discuss their PC power management program.

ADM mentioned that the foodservice sector has more saving potential than only lighting savings. PNM agrees and KEMA has therefore been exploring a mid-stream approach to target distributors of foodservice equipment.

PNM will explore the cost effectiveness of incorporating an air compression component into QuickSaver.

The incentive has been increased for certain plug load measures to increase participation.

PNM has developed a brochure for use with the Commercial Comprehensive program that provides customers with information on PNM and NMGC programs. PNM has also had preliminary discussions with NMGC to discuss options for the sharing of energy savings. This could increase the cost-effectiveness of programs that result in gas and electric savings.

PNM's New Construction program is focused on the design phase of the project, working with the building owner and the engineering and design firm. Therefore, our outreach is not focused on the general contractor. However, ADM's input is duly noted, and PNM will follow-up with KEMA to discuss a means of education outreach to the contractors performing the work.

Energy Efficiency Rule Reporting Requirements

This section of the annual report follows the reporting requirements and section headings as specified in the NMPRC Energy Efficiency Rule Section 17.7.2.13.C(1 – 10)[6].

C. (1) Independent Measurement and Verification Report

PNM contracted with ADM to conduct the independent evaluation of its energy efficiency programs. The M&V Report is submitted as a separate document along with this annual report.

C. (2) Program Expenditures Not Included in the M&V Report

The expenditures for the Program in 2013 were $18,105,116. These expenditures include all expenses incurred by PNM to develop and implement the individual programs. The same total expenditure data was provided to ADM to be included in the M&V Report.

C. (3 & 4) Budgeted Funds Not Spent and Material Variance in Costs

The Commission originally approved program budgets in its order issued on June 23, 2011 in Case No. 10-00280-UT. The latest budget modifications for programs approved in Case No. 10-00280-UT were approved in the Commission order issued on August 7, 2013. New program budgets were approved by the Commission in Case No. 12-00317-UT in its order issued on November 6, 2013 and became effective in December 2013. The total approved budget for calendar year 2013, reflecting all modifications and prorated to reflect one month under the new budgets, was $16,834,051. Total expenses for the year were $18,105,116; therefore, total spending was about eight percent (8%) above the approved budget. Table 3 shows the budgeted amounts, the actual expenditures, and the percent variance.

[6] PNM recognizes that there is disagreement regarding what version of the Energy Efficiency Rule is legally in effect, if any. In developing this 2013 annual report, PNM has relied on the guidelines contained in the 2007 version of the Rule, adapted to reflect variances from that version of the Rule as provided in the Final Order Granting Blanket Variances in NMPRC Case No. 11-00439-UT (Nov. 22, 2011). PNM refers to that version as the Energy Efficiency Rule.

Table 3 – Budget and Actual Costs

Programs	Approved 2013 Budget	2013 Actual Costs	Variance %
Refrigerator Recycling	$ 1,239,215	$ 1,410,722	14%
Residential Lighting	$ 1,682,164	$ 1,793,409	7%
Energy Star Homes	$ 191,938	$ 203,536	6%
Community CFL	$ 21,094	$ 21,228	1%
Commercial Comprehensive	$ 4,917,047	$ 5,814,315	18%
Easy Savings	$ 317,361	$ 395,355	25%
Refrigerator & CFL Replacement	$ 171,899	$ 205,431	20%
PNM Power Saver	$ 5,050,583	$ 5,667,971	12%
PNM Peak Saver	$ 2,818,148	$ 2,151,043	-24%
Market Transformation	$ 113,247	$ 99,739	-12%
Home Energy Reports (New)	$ 42,336	$ 41,491	-2%
Residential Stay Cool (New)	$ 58,075	$ 44,675	-23%
Student Efficiency Kits (New)	$ 26,256	$ 32,165	23%
Whole House (New)	$ 87,703	$ 106,332	21%
LI Home Efficiency (New)	$ 96,986	$ 117,704	21%
Total	$ 16,834,051	$ 18,105,116	8%

The variations in actual costs from the budgeted costs are primarily due to customer participation being higher or lower than projected. New programs did not have participation in 2013 since they were only in effect for one month and the costs reflect the start-up activities. The budget amounts for new programs in 2013 were based on one twelfth (1/12) of the annual approved budgets and the variance in costs were due to implementation activities being higher or lower for some programs.

C. (5) Tariff Reconciliation

(Please see Tariff Collections section on page 11)

C. (6 & 9) Cost Allocation, Expenses by Program and Rate-of-Return

All 2013 Program expenses including labor, materials, third-party expenses and all other costs are tracked through a unique set of account numbers. Likewise, all revenue collected through the tariff rider is booked to a special regulatory asset account which is balanced against the expenses. These costs and revenues are kept separate from PNM rate-base accounting; therefore, there is no cross-subsidization and no impact on the PNM allowed rate-of-return. Costs specific to an individual program, such as incentives and targeted promotion, are allocated directly to that program. Shared costs, such as administration, are allocated to each program in proportion to their direct costs. Table 4 shows the allocation of costs to the various programs for calendar year 2013.

Table 4 – Allocated Program Costs

Programs	Administration	Promotion	M&V	Incentives	Third-Party Costs	Total Costs
Refrigerator Recycling	$ 95,786	$ 174,790	$ -	$ 432,111	$ 708,035	$ 1,410,722
Residential Lighting	$ 107,324	$ 75	$ -	$ 1,187,384	$ 498,626	$ 1,793,409
Energy Star Homes	$ 12,245	$ -	$ -	$ 92,616	$ 98,675	$ 203,536
Community CFL	$ 625	$ -	$ 8,456	$ -	$ 12,146	$ 21,228
Commercial Comprehensive	$ 369,345	$ 725	$ 177,480	$ 3,844,645	$ 1,422,120	$ 5,814,315
Easy Savings	$ 11,592	$ -	$ 25,881	$ -	$ 357,882	$ 395,355
Refrigerator & CFL Replacement	$ 10,373	$ 2,084	$ 20,312	$ -	$ 172,662	$ 205,431
PNM Power Saver	*$ 359,160*	*$ -*	*$ 23,169*	*$ 1,569,520*	*$ 3,716,122*	*$ 5,667,971*
PNM Peak Saver	*$ 156,568*	*$ -*	*$ 23,169*	*$ 713,400*	*$ 1,257,905*	*$ 2,151,043*
Market Transformation	$ 6,942	$ 92,797	$ -	$ -	$ -	$ 99,739
Home Energy Reports (New)	$ 2,228	$ -	$ -	$ -	$ 39,262	$ 41,491
Residential Stay Cool (New)	$ 2,399	$ -	$ -	$ -	$ 42,275	$ 44,675
Student Efficiency Kits (New)	$ 1,728	$ -	$ -	$ -	$ 30,438	$ 32,165
Whole House (New)	$ 5,711	$ -	$ -	$ -	$ 100,621	$ 106,332
LI Home Efficiency (New)	$ 6,322	$ -	$ -	$ -	$ 111,382	$ 117,704
Total	$ 1,148,349	$ 270,471	$ 278,468	$ 7,839,677	$ 8,568,151	$ 18,105,116

C. (7) Program-Specific Metrics

The following tables present program-specific information, including forecasted savings, achieved savings, program participants, net participant costs, cost-per-kWh of saved energy, economic benefits realized in 2013 and the economic benefits to be expected over the life of the measures. The labeling of items a) through g) corresponds to the items listed in section 17.7.2.13.C (7) of the Rule. Please see the above section for the costs by program (part of item (c) in the Rule) and Appendix A for avoided cost information which responds to item (d) in the Rule. Please note that all energy savings are reported as the savings at the customer meter. The various categories are described below each table.

Table 5 – Achieved Savings

Programs	17.7.2.13.C (7) (a)			
	Forecasted Savings (kWh)*	Achieved Savings (kWh)**	Achieved Savings (kW)**	Achieved Lifetime Savings (kWh)***
Refrigerator Recycling	6,587,754	7,071,954	1,209	34,380,783
Residential Lighting	22,340,150	26,338,540	3,219	184,369,782
Energy Star Homes	310,597	162,860	117	4,885,800
Community CFL	187,060	109,542	13	766,796
Commercial Comprehensive	28,952,974	38,022,323	7,048	439,348,303
Easy Savings	1,239,535	1,616,433	151	12,464,655
Refrigerator & CFL Replacement	1,088,606	363,574	59	4,781,032
Large Customer Self-Direct	-	150,571	17	2,258,565
PNM Power Saver	348,000	724,764	43,240	724,764
PNM Peak Saver	738,809	1,001,290	19,142	1,001,290
Total	61,793,485	75,561,851	74,213	684,981,770

(a) * Forecasted kWh savings are based on the target participation levels for program year 2013 as contained in the program plan approved in NMPRC Case No. 10-00280-UT, adjusted to reflect the most recent M&V values for unit savings.
** Achieved kWh and kW savings were determined by applying the validated net savings per participant for each program, adjusted for the free-rider rate, times the number of participants. Unit savings rates were adjusted based on the results contained in the 2013 M&V Report.
*** Achieved lifetime savings are annual savings times the effective useful life of the measure as determined in the 2013 M&V Report.

Table 6 – Program Participation and Economic Benefits

	17.7.2.13.C (7) (b)		17.7.2.13.C (7)(c - g)			
Programs	Program Participants	Program Units	(c) Participant Costs	(e) Cost per kWh Saved	(f) 2013 Economic Benefits	(g) NPV of Total Economic Benefits
Refrigerator Recycling	8,588	8,588	$ -	$ 0.04	$ 271,473	$ 1,281,087
Residential Lighting	132,635	1,061,080	$ 1.13	$ 0.01	$ 890,646	$ 5,875,533
Energy Star Homes	140	140	$ 3,310	$ 0.04	$ 26,936	$ 593,538
Community CFL	1,464	5,856	$ -	$ 0.03	$ 3,636	$ 23,960
Commercial Comprehensive	1,009	1,009	$ 8,224	$ 0.01	$ 1,543,262	$ 16,849,740
Easy Savings	6,761	6,761	$ -	$ 0.03	$ 79,815	$ 568,672
Refrigerator & CFL Replacement	312	4,952	$ -	$ 0.04	$ 13,678	$ 165,832
Large Customer Self-Direct	3	3	$ -	$ -	$ -	$ -
PNM Power Saver	31,830	39,046	$ -	NA	$ 5,020,174	$ 5,020,174
PNM Peak Saver	111	111	$ -	NA	$ 2,271,927	$ 2,271,927
Total	182,853	1,127,546	$ 11,535		$10,121,545	$ 32,650,463

(b) Program participants are those who participated in calendar year 2013. For some programs this value is estimated based on the number of units. Program units are the number of measures installed or purchased.
(c) Participant costs are the participants' costs to purchase and install the measures, less the rebates customers received.
(d) Avoided costs are shown in Appendix A.
(e) The cost-per-kWh saved is determined by dividing the program cost by the lifetime energy saved.
(f) The 2013 economic benefit for each program was determined by multiplying the 2013 avoided costs times the annual energy and demand savings.
(g) The net-present-value of the total economic benefits was determined by taking the discounted value of the annual avoided costs times the annual savings over the effective useful life of each program measure.

C. (8) Non-Energy Benefits

Table 7 shows the estimated CO_2 emission reductions and water savings associated with the PNM portfolio of programs. The annual avoided CO_2 emissions for the 2013 Program were determined through system modeling and the resulting rate of savings was multiplied by the lifetime energy saving of the portfolio of programs. The water savings are determined by

multiplying the PNM average jurisdictional water consumption by the annual and lifetime energy savings.

Table 7- Environmental Impacts

Emission Impact	Avoided Electric Emissions Rate (Metric Tons/GWh)	Annual Avoided Emissions (Metric tons)	Lifetime Avoided Emissions (Metric tons)
CO_2 Reduced	500.6	37,826	342,902
Water Impact	**Water Consumption (gal/MWH)**	**Annual Water Saved (gal)**	**Lifetime Water Saved (gal)**
Water Saved	354	26,748,895	242,483,547

C. (10) Self-Direct Programs

PNM received and approved three applications for Self-Direct programs in 2013. PNM reviewed the applications, communicated the approvals to the customers and notified the Commission. All projects met the simple payback criteria of between one and seven years. Total annual energy savings for the four projects were 150,571 kWh, and the average effective useful life was 15 years.

Appendix A – PNM Avoided Costs

The following table provides the avoided energy and demand costs for calendar year 2013. These costs were used in the PNM TRC model and by ADM in its program evaluation. The costs are the same as those submitted in Case No. 12-00317-UT, which was the most recently approved energy efficiency case at the time the annual report was submitted.

	Residential Energy	Non-Residential Energy	Capacity
Units:	**$/kWh**	**$/kWh**	**$/kW-yr**
2013	$ 0.0209	$ 0.0217	$93.71
2014	$ 0.0228	$ 0.0238	$93.71
2015	$ 0.0244	$ 0.0257	$93.71
2016	$ 0.0253	$ 0.0267	$93.71
2017	$ 0.0265	$ 0.0279	$93.71
2018	$ 0.0290	$ 0.0302	$93.71
2019	$ 0.0366	$ 0.0375	$93.71
2020	$ 0.0376	$ 0.0385	$93.71
2021	$ 0.0387	$ 0.0396	$93.71
2022	$ 0.0397	$ 0.0407	$93.71
2023	$ 0.0408	$ 0.0419	$93.71
2024	$ 0.0420	$ 0.0431	$93.71
2025	$ 0.0432	$ 0.0444	$93.71
2026	$ 0.0444	$ 0.0457	$93.71
2027	$ 0.0456	$ 0.0470	$93.71
2028	$ 0.0468	$ 0.0483	$93.71
2029	$ 0.0481	$ 0.0497	$93.71
2030	$ 0.0495	$ 0.0511	$93.71
2031	$ 0.0509	$ 0.0526	$93.71

Appendix B – Load Management Events

The following table lists the times and durations of the load management events in 2013.

Event Date	Event Start Time (MDT)	Event End Time (MDT)	Duration (Hrs)
6/10/2013	2:00 PM	6:00 PM	4.0
6/11/2013	2:00 PM	6:00 PM	4.0
6/12/2013	2:00 PM	6:00 PM	4.0
6/13/2013	2:00 PM	6:00 PM	4.0
6/18/2013	2:00 PM	6:00 PM	4.0
6/19/2013	2:00 PM	6:00 PM	4.0
6/20/2013	2:00 PM	6:00 PM	4.0
6/21/2013	2:00 PM	6:00 PM	4.0
6/24/2013	2:00 PM	6:00 PM	4.0
6/25/2013	2:00 PM	4:30 PM	2.5
6/26/2013	2:00 PM	6:00 PM	4.0
6/27/2013	2:00 PM	6:00 PM	4.0
6/28/2013	2:00 PM	6:00 PM	4.0
7/9/2013	2:00 PM	6:00 PM	4.0
7/31/2013	2:00 PM	6:00 PM	4.0
8/26/2013	2:00 PM	8:00 PM	6.0
Total = 16 Events and 64.5 Event Hours			