



PNM Energy Efficiency Program

2017 Annual Report

Public Service Company of New Mexico (PNM)

April 13, 2018

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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 2017 (“2017 Program”). This annual report is based on the measurement and verification of PNM’s 2017 programs performed by Evergreen Economics (“Evergreen”). The Evaluation of the 2017 Public Service Company of New Mexico Energy Efficiency and Demand Response Programs (“M&V Report”) prepared by Evergreen is submitted as a separate document. This report marks the 10 year anniversary of PNM energy efficiency programs. In celebration of that milestone, a special supplement celebrating 10 years of energy efficiency program implementation is attached as Appendix B.

The programs evaluated in this annual report were approved by the New Mexico Public Regulation Commission (“NMPRC” or “Commission”) in Case No. 16-00096-UT. This report covers all costs incurred in the implementation of the programs and all customer participation in the programs from January 1, 2017 through December 31, 2017.

The following programs are included in this annual report:

- (1) Commercial Comprehensive
- (2) Residential Comprehensive
- (3) Residential Lighting
- (4) Energy Smart
- (5) PNM Home Works
- (6) New Home Construction
- (7) Easy Savings Kit
- (8) Power Saver load management
- (9) Peak Saver load management
- (10) Market Transformation
- (11) Self-Direct

Program Results Summary

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

- The 2017 Program was cost effective, as measured by the Utility Cost Test (“UCT”), with a UCT of 1.74 for the portfolio of programs.

- The total annual net savings after free rider and other adjustments were accounted for was 74.5 GWh at the customer meter, or 80.7 GWh including system losses.
- The two load management programs represent a total capacity of approximately 60 MW.
- Total program expenses were about \$25.9 million.
- The average cost per kWh of lifetime energy savings from the energy efficiency programs, not including load management, was 2.9¢/kWh.

Table 1 shows the total number of customer participants (or units), the annual energy and demand savings, the lifetime energy savings, and the total costs for each of the programs for calendar year 2017.

Table 1

Program	Participants or Units	Annual Savings (kWh)	Annual Savings (kW)	Lifetime Savings (kWh)	Total Program Costs
Residential Comprehensive	14,653	10,753,827	3,869	96,221,628	\$ 5,560,837
Residential Lighting	1,274,328	22,420,807	2,929	206,723,121	\$ 3,029,207
Commercial Comprehensive	6,487	34,926,034	4,637	314,438,797	\$ 9,100,869
Easy Savings	6,729	2,560,778	93	26,487,978	\$ 440,976
Energy Smart	5,097	784,357	59	4,298,992	\$ 203,409
New Home Construction	395	579,828	237	9,857,067	\$ 442,558
PNM Home Works	9,530	1,845,130	112	20,598,960	\$ 458,373
Large Customer Self-Direct	-	-	-	-	\$ -
PNM Power Saver	42,231	327,198	41,760	327,198	\$ 3,658,316
PNM Peak Saver	106	286,170	18,721	286,170	\$ 2,293,587
Market Transformation	-	-	-	-	\$ 708,214
Total	1,359,556	74,484,131	72,417	679,239,911	\$ 25,896,345

Program Information

Commercial Comprehensive

PNM contracted with DNV-GL, Inc. and with TRC Solutions to implement the Commercial Comprehensive energy efficiency program, comprised of six sub-programs. DNV-GL implements the New Construction, Retrofit Rebates, Building Tune-Up, Quick Saver small business and Distributor Discount programs. TRC implements the Multifamily program.

New Construction and **Retrofit Rebates** offer pre-set and custom incentives for installing qualifying equipment in new and existing buildings, and implementing efficient designs in new buildings. In 2017, eligible equipment included energy efficient lighting, HVAC, refrigeration, food service equipment, motors and variable speed drives, window film and plug load controls. **Building Tune-Up** offers incentives for building owners and operators to improve whole-system building efficiency through retro-commissioning, to do advanced tune-ups of air conditioning systems, and to support building operator certification training. In the PNM **Distributor Discount** program a participating distributor sells high-efficiency equipment from an approved product list to an eligible PNM customer; the customer receives an instant discount at the point of purchase, and PNM pays the rebate directly to the distributor.

In 2017, there were 445 customer projects in the New Construction, Retrofit Rebate, Building Tune-Up and Distributor Discount programs. The projects completed at these customers' facilities resulted in over \$2,400,000 in rebates paid.

PNM Quick Saver is a direct-install program for small business customers who have an annual peak electric demand of 200 kW or less. It offers business customers pre-set incentives for installing qualifying lighting products and refrigeration in existing buildings. In 2017, the program focused on continuing to train participating contractors for continued and successful program implementation. About \$1,600,000 in incentives was paid on 272 customer projects.

The **Multifamily** program is designed to meet the needs of the hard-to-reach multifamily customer segment through offering an attractive mix of low-cost direct install measures, such as lighting replacement, along with deeper savings measures, such as upgrades to cooling equipment, all in one package. The program made significant progress in reaching numerous property owners in 2017 and in scheduling retrofits. The program completed 55 projects comprising about 5,770 dwelling units and providing about \$670,000 in rebates in 2017. About 54% of the units were occupied by low income tenants.

Residential Comprehensive

Refrigerator Recycling: ARCA, Inc., the third-party contractor utilized for the Refrigerator Recycling program, operates a recycling center in Albuquerque. The facility disassembles all of the refrigerators and freezers collected through the program. The program was very successful in 2017 with 7,689 units recycled.

Home Energy Checkup and Low Income Checkup: 2,726 Home Energy Checkups were completed throughout PNM's service territory in 2017, 1,070 of which were for income-qualified customers. PNM customers pay a fee for a Home Energy Assessor to come to their home and complete a walk through energy assessment. The assessor installs a selection of direct install measures that the home might require, including LEDs, a low-flow showerhead, advanced power strips and faucet aerators. The assessor also visually inspects the home's windows and level of insulation and makes recommendations for the resident's benefit. In addition to this, the assessor reviews the age and condition of the existing refrigerator, dishwasher, and clothes washer in the home, and educates the PNM customer about rebates that are available for replacing these qualified appliances before they fail. Rebates for installing high efficiency cooling and Wi-Fi thermostats are also available. For income-qualified customers the program fee is waived and customers could qualify for a new ENERGY STAR refrigerator to replace an older, inefficient model. In 2017, 559 refrigerators were replaced as part of this program.

Residential Cooling: This component offers rebates on the purchase and installation of advanced evaporative coolers, high efficiency air source heat pumps, ENERGY STAR room air conditioners, high efficiency refrigerated air conditioners, and ENERGY STAR variable speed pool pumps. The program was very successful, and paid rebates on 4,238 coolers and pool pumps. PNM promoted this program largely through point-of-purchase materials at big-box stores and pool supply stores, and also conducted outreach to contractors who install the various technologies.

Residential Lighting

In 2017, the Residential Lighting program provided rebates for 1,272,054 LED bulbs. Only 2,274 CFL bulbs received rebates and no CFLs will be rebated in 2018. There were a total of about 139 participating retail stores in the Residential Lighting program throughout 2017, comprised of about 20 different retail chains and stores that offered the markdown rebates. 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 \$1.63 per bulb.

Each participating retailer displayed point-of-purchase (“POP”) materials describing the benefits of LEDs, the different options available and information on the discounts provided by the program. Residential Lighting program field representatives provided participating stores with collateral and point-of-sale materials, and completed about 2,400 store visits. They also organized retailer training sessions and conducted 45 outreach events throughout the year, including several school and community events.

PNM Home Works

The PNM Home Works program expanded in 2017 to include high school classes in addition to fifth grade. The program begins with a 60 minute interactive, hands-on presentation for 5th grade students and their teachers at participating schools. The program teaches students about energy efficiency, renewable and non-renewable natural resources, and how electricity is created and delivered into homes and businesses. Each student is given a sealed energy efficiency kit to take home which includes easy-to-install technologies such as a low-flow showerhead, faucet aerators, efficient light bulbs, an LED night light, and a written guide to assist families with installing the efficient technologies together while also learning about additional ways to reduce energy waste. The high school presentation includes a special emphasis on sustainability and on the unique energy usage footprint of a high school-aged student in the home and the kit contains a smart power strip. The program provided 9,530 kits to 91 schools during the 2017 spring and fall semesters within the PNM service territory.

New Home Construction

This program provides home builders with incentives to exceed the level of energy efficiency required by the applicable building code. The program offers participants incentives for highly efficient new single-family residential construction through either a prescriptive or a performance path. Under the prescriptive path, home builders receive rebates for specific energy efficient technologies; whereas under the performance path home builders can choose to receive rebates for overall home performance upon verification by credentialed energy raters. The program provided incentives on 395 homes in 2017.

Easy Savings Kit

In 2017, a total of 6,729 kits that include LEDs, low-flow showerheads and other items were distributed to low-income PNM customers. Approximately 82% of these kits were distributed by mail to customers who enrolled after receiving a direct-mail postcard that was sent to PNM customers that qualified for the program and who had not received an Easy Savings Kit in the past five years. In 2017, PNM also used several other avenues for reaching income-qualified customers. Utilizing eight New Mexico assistance agencies, PNM was able to distribute 1,232

kits directly to low income customers seeking support. PNM also distributed kits directly to low income customers who attended the Albuquerque PNM Good Neighbor Fund event in October 2017.

Energy Smart

PNM contracted with the New Mexico Mortgage Finance Authority (MFA) to install LEDs and replace inefficient refrigerators. In 2017, additional efficiency measures were added to the program including attic insulation, air and duct sealing, and programmable thermostats for installation in the homes of income-qualified PNM customers. MFA and its subcontractors replaced 150 refrigerators in the homes of PNM customers in 2017 as part of this program.

Other Low Income Programs

In addition to the three programs dedicated to low income customers, Low Income Home Energy Checkup, Easy Savings and the Energy Smart program, a large percentage of participants in two other programs are low income customers, the Multifamily program and the PNM Home Works program. 54% of the Multifamily projects, representing about 3,100 apartments, benefited low income tenants. A large percentage of students in PNM's service territory come from low income homes. PNM estimates that at least 40% of the PNM Home Works kits were provided to low income students. Approximately 8% of the total 2017 Program spending went to low income programs. In addition, it is likely that many low income customers participated in the Refrigerator Recycling and Residential Lighting programs but income level is not known for participants in those programs.

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 2017, 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 and promotional campaigns stressing the benefits of energy efficiency.

Additionally, Energy-Savvy, Inc. provided an on-line energy audit tool – PNM Home Energy Analyzer – for residential customers who opt to complete a short survey about their home. This tool helps customers by providing analysis and insight about how their home uses energy, offering tips to help reduce energy use and save money, and recommending other PNM programs as applicable, including rebates for replacing existing appliances with ENERGY STAR qualified appliances.

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 2017. PNM dispatched the load management resource 6 times for a total of about 24 hours. The peak load curtailment amount was 60 MW and the

average curtailment amount over all event hours, as verified by Evergreen, was 47 MW. Table 2 shows the times and durations of the load curtailment events in 2017.

Table 2

Event Date	Start Time	End Time	Duration (Hr)
6/19/2017	4:00 PM	8:00 PM	4.0
6/20/2017	2:00 PM	6:00 PM	4.0
6/21/2017	4:20 PM	7:50 PM	3.5
7/3/2017	2:00 PM	6:00 PM	4.0
7/10/2017	2:00 PM	6:00 PM	4.0
7/26/2017	4:00 PM	8:00 PM	4.0
6 Events in 2017			23.5

On January 31, 2018, the New Mexico Public Regulation Commission ("NMPRC") issued a final order in Case No. 17-00076-UT, PNM's 2018 energy efficiency program application, which directed Evergreen Economics, as independent program evaluator for PNM's energy efficiency and load management ("EE/LM") programs, to do the following:

- In PNM's future M&V reports, the independent evaluator shall verify that load reductions from deployment of PNM's LM Programs avoided or offset the need for or use of additional peaking units or power purchases or shifted demand from peak to off peak period.
- In its next report of PNM's EE/LM Programs, the independent evaluator shall evaluate actions that might increase participation in PNM's EE/LM Programs while maintaining the cost effectiveness of the Programs and recommend actions, if advisable.

Evergreen addressed these points on pages 14 through 20 of the M&V Report. Evergreen concluded: "that in 2017 the LM Programs served a capacity resource that avoided the need for additional supply-side peaking capacity. We also discuss at length the impact of the number and duration of LM events on the cost-effectiveness and value of the LM Programs and conclude that the value of the program is in its expected level of capacity rather than the number of times it is used. Therefore, the evaluation team does not have specific recommendations regarding increased participation and use of the LM programs."

The 2016 M&V report¹, prepared by ADM Associates, also addressed the second point of the NMPRC request. The 2016 M&V report included a survey of Peak Saver participants in which they were asked about conditions that would increase their participation in the program. The following tables taken from the 2016 M&V report summarize the responses.

¹ The 2016 Independent Measurement and Verification Report Part 1 may be found at the following website:
<https://www.pnm.com/regulatory/>

Table 4-10 Support PNM Can Provide to Increase Event Participation

What tools, information, or other assistance could PNM provide to help you increase the number of Peak Saver events that you participate in?	Percent of Respondents (n = 15)
Higher rebates	47%
More notice of upcoming events	20%
Other	20%
Training on how to plan for an event	13%
Nothing	27%
Don't know	7%

Table 4-11 Support PNM Can Provide to Increase Load Reduction

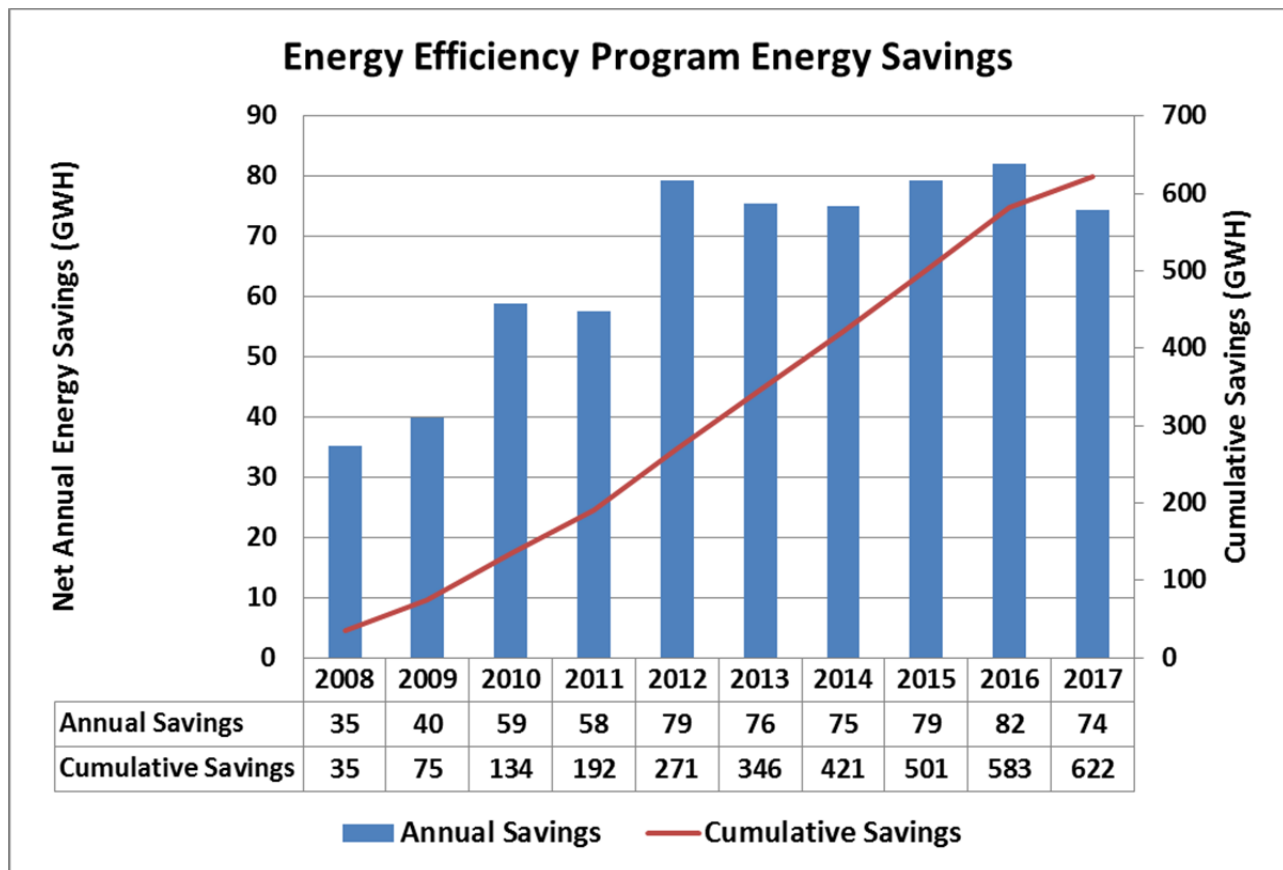
What tools, information, or other assistance could PNM provide to help you increase the electrical load reduction you achieve during a Peak Saver event?	Percent of Respondents (n = 16)
Higher rebates	47%
More notice of upcoming events	20%
Other	13%
Nothing	33%
Don't know	7%

Program Benefits and Goals

The 2017 Program benefitted the PNM system, customers in all customer classes, the environment and the New Mexico economy. The Efficient Use of Energy Act (“EUEA”) requires that PNM achieve cumulative savings of 411 GWh by 2014, equal to five percent (5%) of PNM’s retail sales in 2005, and 658 GWh by 2020, equal to eight percent (8%) of 2005 retail sales. PNM’s cumulative savings of 421 GWh through 2014 exceeded the 2014 savings requirement specified in the EUEA. Figure 1 shows the annual incremental savings, on the left axis, and annual cumulative savings achieved through 2017 on the right axis.

The energy efficiency measures installed by PNM customers participating in PNM programs in any specific year will continue to save energy in years to come. However, for cost-effectiveness analysis and for purposes of determining the cumulative savings applicable to the EUEA goals in 2014 and 2020, the average effective useful life (EUL) of the portfolio is applied. The average EUL for the portfolio is determined by dividing the total lifetime savings by the annual savings. The average portfolio EUL for the 2017 Program is nine (9) years, which is the same portfolio EUL reported for the years 2008 through 2015. The EUL in 2016 was ten years. The 2008 annual savings no longer contribute to the cumulative savings since the nine year life for those savings ended in 2016. Therefore, cumulative savings for 2017 are the sum of all annual savings beginning in 2009. Beginning in 2018 PNM programs will have to achieve on average 64 GWH of annual savings in years 2018 through 2020 in order to achieve the 2020 savings requirement of 658 GWH.

Figure 1



A wide range of customers participated in the 2017 Program. In the Refrigerator Recycling program, 7,689 inefficient refrigerators and freezers were removed from the market. 1,272,054 LED bulbs were discounted through the Residential Lighting program and more than 14,000 low-income customers benefited from the five programs that serve low-income customers. 717 commercial customers, including over 272 small commercial accounts, participated in the business energy efficiency programs and 5,770 apartments were renovated with high efficiency equipment. In addition, approximately 35,000 residential and business customers participated in the demand response 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 2017 Program provided rebates and other incentives valued at about \$12.6 million directly to customers.

The 2017 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 two, the economic impact of the customer incentives would be about \$25 million dollars. The 2017 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 2017 Program directly supported approximately 35 local employees of these third-parties. In addition, much of the \$12.6 million in incentives paid to customers supported additional employment by local companies that provided the energy efficiency improvements.

In addition, the energy savings from the 2017 Program will result in a reduction in water consumption and CO₂ emissions. Estimated water savings and reductions of CO₂ are shown in Table 9 below.

The PNM Energy Efficiency Program, now in its eleventh year, is a key resource in the 2017 Integrated Resource Plan (“2017 IRP”). The 2017 IRP examined many different portfolio options that could be implemented to meet expected growth in the demand for electricity from 2017 to 2036. 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. PNM identified its most cost-effective portfolio to meet the objective of the NMPRC IRP rule which is to “identify the most cost effective portfolio of resources to supply the energy needs of customers. For resources whose costs and service quality are equivalent, the utility should prefer resources that minimize environmental impacts”.² PNM’s IRP includes the projected impacts of the 2017 Program and projected growth of the programs that will allow PNM to achieve the spending requirements and energy saving goals specified in the EUEA.

Tariff Collections

The costs of implementing the 2017 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 (3.00%) of the monthly bill charge. A profit incentive rate element is also assessed monthly as a percentage (0.194%).

Actual program expenses for calendar year 2017 were \$25,896,345. During calendar year 2017, PNM had actual collections of \$25,234,509 through the 3.0% program cost element of Rider 16. This resulted in an under collection of \$661,836. However, PNM also owes \$21,213 in carrying charges on the monthly balances. This resulted in a total under-collection of \$640,623. The Final Order in Case No. 16-00096-UT authorized PNM to earn a Profit Incentive in 2017. PNM submitted the documentation for a tariff rider adjustment, including the program cost under-collection and profit incentive reconciliation, with supporting testimony, along with this annual report.

2017 Cost Reconciliation and Impact on 2019 Program Budget

In compliance with the Final Order in Case No. 16-00096-UT, PNM will deduct the 2017 under-collection amount of \$640,623 from the 2019 program plan budget. Table 3 below provides the revised program budgets, savings, participation levels and UCT results for calendar year 2019.

² “PNM 2017 – 2036 Integrated Resource Plan”, July 2017, p. 13.

Table 3

2019 Program	Budget	Annual kWh Savings	Annual kW Savings	Participation or Units	2019 UCT
Commercial Comprehensive	\$ 8,896,717	37,687,279	5,711	853	2.47
Residential Comprehensive	\$ 4,981,833	9,942,038	3,741	13,575	1.89
Residential Lighting	\$ 2,396,214	17,889,341	2,366	970,000	4.91
PNM Home Works	\$ 526,345	1,947,500	92	9,500	1.48
New Home Construction	\$ 628,865	669,375	240	750	1.44
Energy Smart	\$ 240,711	366,731	40	230	1.28
Easy Savings Kit	\$ 383,438	2,062,120	223	6,200	2.99
Power Saver	\$ 4,750,697	1,080,000	48,000	49,440	1.89
Peak Saver	\$ 1,960,888	880,000	22,000	110	1.92
Market Transformation	\$ -	-	-	-	n/a
TOTAL	\$24,765,708	72,524,384	82,413		2.40

Regulatory Proceedings

On April 14, 2017, PNM filed its 2018 energy efficiency and load management program plan application (2018 Plan) with the Commission (Case No. 17-00076-UT). PNM and several parties entered into a stipulation, and a public hearing was held on September 11, 2017 on the stipulation. On January 31, 2018, The Commission issued an Order Partially Approving Certification of Stipulation in Case No. 17-00076-UT. Pursuant to that order, PNM filed an Advice Notice to modify the Energy Efficiency Rider, which became effective February 28, 2018.

On April 14, 2017, PNM filed an Advice Notice to reconcile the collection of the 2016 program costs and profit incentive. Rider 16 was modified to reflect the profit incentive reconciliation and the new rates went into effect May 26, 2017. The 2016 program cost under collection amount of \$1,656,682 was deducted from the 2018 Plan budget, in compliance with the Final Order in Case No. 16-00096-UT.

Energy Efficiency Rule Reporting Requirements

The following section of the annual report provides detailed information on the performance of the 2017 Program including information required by the NMPRC Energy Efficiency Rule, Section 17.7.2.14 – Annual Report.

Documentation of Program Expenditures

All 2017 Program expenses, including labor, materials, third-party expenses and all other costs, are tracked through a unique set of accounts. 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 customer incentives and targeted promotion, are allocated directly to that program. Shared costs, such as internal administration, are allocated to each program in proportion to their direct costs.

Total calendar year expenditures for the 2017 Program were \$25,896,345. These expenditures include all expenses incurred by PNM to develop and implement the individual programs. The same total expenditure data was provided to Evergreen to be included in the M&V Report. Table 4 shows the allocation of costs to the various programs for calendar year 2017. The Market Transformation program is shown separately in order to report the costs; however, the costs are allocated pro rata to the remaining programs for purposes of calculating net benefits and the UCT of each program.

Table 4

Programs	Administration	Promotion	M&V	Incentives (Rebates)	Third-Party Costs	Total Costs
Residential Comp.	\$ 307,813	\$ 389,457	\$ -	\$ 2,448,257	\$ 2,415,310	\$ 5,560,837
Residential Lighting	\$ 145,064	\$ 90,437	\$ 63,211	\$ 2,080,734	\$ 649,761	\$ 3,029,207
Commercial Comp.	\$ 512,065	\$ 144,518	\$ 153,509	\$ 5,210,445	\$ 3,080,332	\$ 9,100,869
Easy Savings	\$ 16,844	\$ 25,345	\$ -	\$ 237,765	\$ 161,022	\$ 440,976
Energy Smart	\$ 8,857	\$ 1,523	\$ -	\$ 182,042	\$ 10,987	\$ 203,409
New Home Construction	\$ 21,633	\$ 24,537	\$ -	\$ 172,588	\$ 223,800	\$ 442,558
PNM Home Works	\$ 46,083	\$ 15,671	\$ 4,627	\$ 293,963	\$ 98,028	\$ 458,373
PNM Power Saver	\$ 183,737	\$ 24,852	\$ 12,740	\$ 1,233,396	\$ 2,203,590	\$ 3,658,316
PNM Peak Saver	\$ 88,041	\$ 4,523	\$ 6,507	\$ 680,000	\$ 1,514,516	\$ 2,293,587
Market Transformation	\$ 86,390	\$ -	\$ -	\$ -	\$ 621,824	\$ 708,214
Total	\$ 1,416,526	\$ 720,863	\$ 240,595	\$ 12,539,190	\$ 10,979,172	\$ 25,896,345

The Commission approved the portfolio budget in its order issued on January 11, 2017 in Case No. 16-00096-UT. The total approved budget for 2017 was \$25,956,890 and the total actual expenses for the year were \$25,896,345; therefore, total spending was about 0.2 percent (0.2%) below the approved budget. The variations in individual program costs from the budgeted amounts were primarily due to customer participation being higher or lower than projected. The Power Saver load management program had lower participation than expected as well as lower third-party contractor costs. Outreach was increased for a number of other energy efficiency programs in order to increase participation and maintain total portfolio program costs as close as possible to the total approved portfolio budget. The increase in program costs from the budgeted amounts for Residential Comprehensive and Commercial Comprehensive were primarily due to customer participation being higher in response to additional outreach. Residential Lighting was lower due to lower than expected costs of LED bulbs which resulted in lower amounts paid for rebates. New Home Construction was lower because of lower than projected participation. Table 5 shows the budgeted amounts, the actual expenditures, and the variances for each program.

Table 5

Programs	Approved Budget	2017 Actual Costs	Variance (\$)
Residential Comprehensive	\$ 5,146,407	\$ 5,560,837	\$ 414,430
Residential Lighting	\$ 3,536,714	\$ 3,029,207	\$ (507,507)
Commercial Comprehensive	\$ 8,485,249	\$ 9,100,869	\$ 615,619
Easy Savings	\$ 399,316	\$ 440,976	\$ 41,660
Energy Smart	\$ 216,949	\$ 203,409	\$ (13,540)
New Home Construction	\$ 619,320	\$ 442,558	\$ (176,762)
PNM Home Works	\$ 556,161	\$ 458,373	\$ (97,789)
PNM Power Saver	\$ 4,429,288	\$ 3,658,316	\$ (770,972)
PNM Peak Saver	\$ 1,950,158	\$ 2,293,587	\$ 343,429
Market Transformation	\$ 617,326	\$ 708,214	\$ 90,888
Total	\$ 25,956,890	\$ 25,896,345	\$ (60,545)

Estimated and Actual Participation and Savings

Table 6 presents estimated and actual customer participation (or units), annual energy savings and annual peak demand savings for each program. Estimated values represent the targets for calendar year 2017. Please note that all energy savings are reported as the savings at the customer meter. Total savings to PNM include additional savings of 8.3 percent (8.3%) to account for system losses.

Table 6

Program	Estimated Participants/ Units	Actual Participants/ Units	Estimated Savings (kWh)	Actual Savings (kWh)	Estimated Savings (kW)	Actual Savings (kW)
Residential Comp.	14,150	14,653	10,736,099	10,753,827	4,678	3,869
Residential Lighting	850,000	1,274,328	16,189,592	22,420,807	1,865	2,929
Commercial Comp.	3,175	6,487	40,244,696	34,926,034	5,136	4,637
Easy Savings	6,200	6,729	1,148,984	2,560,778	80	93
Energy Smart	2,435	5,097	300,550	784,357	40	59
New Home Construction	700	395	719,280	579,828	211	237
PNM Home Works	9,500	9,530	1,677,040	1,845,130	34	112
PNM Power Saver	-	42,231	562,500	327,198	45,000	41,760
PNM Peak Saver	-	106	900,000	286,170	18,000	18,721
Total			72,478,741	74,484,131	75,044	72,417

Estimated and Actual Costs and Avoided Costs (Benefits)

Table 7 presents the net present value of estimated and actual monetary costs and benefits for each program. Estimated costs and benefits are those contained in the 2017 Program Plan in Case No. 16-00096-UT. The actual net-present-value of monetary 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. Please see Appendix A for PNM avoided costs.

Table 7

Program	Estimated NPV of Monetary Costs	Actual NPV of Monetary Costs	Estimated NPV of Monetary Benefits	Actual NPV of Monetary Benefits
Residential Comprehensive	\$ 4,873,611	\$ 5,218,053	\$ 7,458,673	\$ 7,393,222
Residential Lighting	\$ 3,349,243	\$ 2,842,479	\$ 7,976,545	\$ 8,758,627
Commercial Comprehensive	\$ 8,035,470	\$ 8,539,868	\$ 15,947,886	\$ 13,840,779
Easy Savings	\$ 378,150	\$ 413,793	\$ 693,108	\$ 912,971
Energy Smart	\$ 205,450	\$ 185,609	\$ 224,586	\$ 208,688
New Home Construction	\$ 586,491	\$ 415,277	\$ 601,355	\$ 767,478
PNM Home Works	\$ 526,681	\$ 430,117	\$ 550,030	\$ 714,038
PNM Power Saver	\$ 4,194,504	\$ 3,432,808	\$ 5,182,847	\$ 5,844,209
PNM Peak Saver	\$ 1,846,786	\$ 2,152,204	\$ 2,089,035	\$ 2,624,240
Market Transformation				
Total	\$ 23,996,385	\$ 23,630,208	\$ 40,724,064	\$ 41,064,254

Cost Effectiveness Evaluation

Table 8 presents the Utility Cost Test or UCT ratio for each program and for the total portfolio of programs. The UCT ratio is the ratio of actual monetary benefits to monetary costs that are shown in Table 7 above. The UCT of the total portfolio of programs was 1.74 and all individual programs had a UCT greater than 1.0.

Table 8

Program	UCT
Residential Comprehensive	1.42
Residential Lighting	3.08
Commercial Comprehensive	1.62
Easy Savings	2.21
Energy Smart	1.12
New Home Construction	1.85
PNM Home Works	1.66
PNM Power Saver	1.70
PNM Peak Saver	1.22
Market Transformation	-
Total	1.74

Self-Direct Program Participation and Evaluation

PNM did not receive applications for the Self-Direct program in 2017.

Estimated Water and CO₂ Savings

Table 9 shows the estimated CO₂ emission reductions and water savings associated with the PNM portfolio of programs. The annual avoided CO₂ emissions and water savings for the 2017

Program were determined by multiplying the PNM weighted-average emissions rate and water consumption by the annual and lifetime energy savings.

Table 9

Emission Impact	Avoided Electric Emissions Rate (Metric Tons/GWh)	Annual Avoided Emissions (Metric tons)	Lifetime Avoided Emissions (Metric tons)
CO ₂ Reduced	542.0	40,374	368,177
Water Impact	Water Consumption (gal/MWH)	Annual Water Saved (gal)	Lifetime Water Saved (gal)
Water Saved	328.0	24,430,795	222,790,691

Independent Measurement and Verification Report

PNM contracted with Evergreen Economics to conduct the independent evaluation of the 2017 Program. The M&V Report is submitted as a separate document along with this annual report. A summary of some of the more important findings and recommendations, along with comment from PNM, is provided below.

Background and Purpose

On May 17, 2017 the Commission approved the selection of Evergreen Economics as the state-wide independent evaluator and approved the M&V budget and scope of work for a two year term to conduct annual measurement and verification analysis for the years 2017 – 2018. Evergreen conducted independent evaluation of the 2017 Program and their M&V Report is based on data from January 1, 2017 through December 31, 2017. PNM worked closely with Evergreen to provide the data necessary to complete the 2017 M&V Report. This included rebate processing and participant files, budget data by program and avoided-cost information.

Summary of Findings and PNM Comments

The total portfolio of programs was found to be cost effective and all individual programs were cost-effective. The results of the M&V analysis will be used to adjust technical assumptions made by PNM regarding program performance, unit savings and net-to-gross values. The M&V Report contains many specific findings and recommendations which are summarized in the following section.

Key Points

The evaluator performed program impact evaluations, performed cost effectiveness tests, and made process recommendations. Overall, the evaluator made recommendations to improve the type of data collected and changes to the assumed savings values so that results more closely track PNM workpapers or the New Mexico Technical Resource Manual. They recommend that the PNM workpapers and TRM be consolidated to avoid differing results; however, if changes are made to *ex ante* assumptions they should be clearly documented. Also, when specific unit information is available, the savings should be determined on that basis in lieu of using equipment averages. The primary process improvement recommendation was to simplify the program application process.

Commercial Comprehensive

The Commercial Comprehensive program consists of the following sub-programs; Quick Saver, Retrofit Rebates, New Construction, Midstream and Multifamily. The process evaluation activities, which included surveys with Retrofit Rebate and Quick Saver participants as well as interviews with Multifamily and New Construction participants, found very high levels of satisfaction across various aspects of the programs. Very few instances of dissatisfaction were reported, and the main recommendations for improvement were to simplify the project application process. This is a logical observation; however, this is somewhat difficult because the savings and incentives require documentation of the pre and post install conditions. A recommendation for the multifamily program was to improve outreach and marketing to reach more potential participants. However, the multifamily program was over prescribed, so marketing was intentionally pulled back.

To determine the mix of projects to evaluate, a statistically significant sample of projects, stratified by savings and measure type, was defined for detailed desk reviews. Detailed calculations were performed by the evaluator on 89 separate projects and they compared results with the savings calculated by the implementer. In several situations, they could not duplicate the results. One explanation for this is the implementer applied adjustments to the project applications based on first-hand knowledge obtained during the site inspections (which was not specifically documented in the database). To determine verified savings, the evaluator referred to the PNM workpapers and/or the TRM. For each sub-program, the evaluator determined an Engineering Adjustment Factor by dividing the verified savings by the reported savings value. Since only a sample of projects was evaluated, the adjustment factor was then applied to all projects for each sub-program.

PNM expects the engineering adjustment factor will more closely approach 1.0 for 2018 as there will be more time for exchange of information between the evaluator, PNM and the program implementers.

Peak Saver

The evaluator verified the capacity as calculated by the implementer and then calculated a capacity with adjustments made to the baseline. The evaluator, made note of some of the issues with the day-of baseline adjustment factors. Their recommendations are being evaluated for the upcoming season.

Power Saver

The Power Saver program is a direct load control program which means the implementer can send a signal to a controller on a refrigerated air conditioning unit. The controller uses an adaptive algorithm to cycle the compressor at half of the run time of the previous hour, thereby lowering coincident demand and saving energy. The evaluator verified the calculations of the implementer using 5-minute data comparing curtail and control groups. The implementer calculations are based on the highest rolling 15-minute kW reduction using 5-minute data, while the evaluator calculated the average reduction over the event hours. Both calculations are useful since one shows the maximum reduction and the other provides an average.

Residential Lighting

The evaluator employed the use of an elasticity model for estimating the net-to-gross (NTG) ratio, a measurement of free ridership. The elasticity model estimates the effect of sales of a discounted lamp when compared to the original price of the lamp. Historically, in-store intercept surveys have been performed; however, bias errors occur with this methodology. Bias is introduced with intercept surveys due to a relatively small number of customers being surveyed compared to the overall volume of lamps sold, and also because of the hypothetical purchase scenarios that are part of that type of survey. The unavailability of customer specific information is another justification for the elasticity model due to the upstream nature of the program. The elasticity was estimated by bulb type (standard or specialty) and retailer (warehouse and non-warehouse). The overall NTG is estimated to be 0.63. The evaluator recommended that more data be captured in the tracking database to include the TRM baseline wattage, and/or the source of the baseline wattage assumed. It was also recommended that the bulb price be recorded in the database, instead of providing retailer agreements.

Home Works

PNM's Home Works program provides energy efficiency education presentations and kits of energy efficiency and water saving measures such as LEDs, faucet aerators, and low-flow showerheads to elementary and high school students. In 2017, 9,530 kits were distributed. A deemed savings review was performed comparing the PNM ex ante assumptions and those specified in the TRM, and the evaluator was able to replicate the PNM calculations with the exception of one measure that was not in the TRM. The evaluator proposed updating the TRM with the shower timer measure.

Appendix A – PNM Avoided Costs

The following table provides the avoided energy, demand and carbon costs for calendar year 2017. These costs were used in the PNM cost-effectiveness model and by Evergreen in its program evaluation. These are the avoided costs included in PNM's most recently approved energy efficiency plan, Case No. 17-00076-UT.

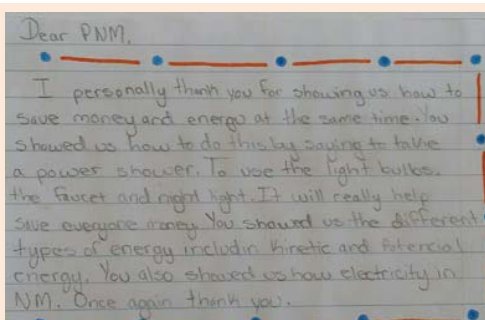
	Energy (\$/kWh)	Capacity (\$/kW-yr)	CO₂ (\$/kWh)
2017	\$ 0.0311	\$129.00	\$ -
2018	\$ 0.0286	\$129.00	\$ -
2019	\$ 0.0298	\$129.00	\$ -
2020	\$ 0.0343	\$129.00	\$ -
2021	\$ 0.0369	\$129.00	\$ -
2022	\$ 0.0395	\$129.00	\$ 0.0030
2023	\$ 0.0398	\$129.00	\$ 0.0027
2024	\$ 0.0404	\$129.00	\$ 0.0023
2025	\$ 0.0419	\$129.00	\$ 0.0028
2026	\$ 0.0429	\$129.00	\$ 0.0032
2027	\$ 0.0431	\$129.00	\$ 0.0041
2028	\$ 0.0436	\$129.00	\$ 0.0050
2029	\$ 0.0440	\$129.00	\$ 0.0055
2030	\$ 0.0445	\$129.00	\$ 0.0060
2031	\$ 0.0447	\$129.00	\$ 0.0065
2032	\$ 0.0450	\$129.00	\$ 0.0066
2033	\$ 0.0455	\$129.00	\$ 0.0067
2034	\$ 0.0453	\$129.00	\$ 0.0068
2035	\$ 0.0455	\$129.00	\$ 0.0069

Appendix B – 10-Year Anniversary Supplement

This appendix to the 2017 annual report on the PNM energy efficiency programs is a special supplement celebrating 10 years of energy efficiency and load management program implementation. The following pages recognize some of the programs, customers, implementers and trade allies that have contributed to the success of the programs.

PNM celebrates 10 years of energy efficiency programs

The PNM Energy Efficiency program portfolio has expanded significantly since its inception ten years ago. New programs have been added and existing programs are continuously being refined to better meet customer needs. In honor of this ten year anniversary, PNM would like to recognize some of our most popular programs over the years and the implementers, trade allies, and participants who have made them so successful.



Programs that benefit our next generation

The PNM Home Works and Energy Innovation programs educate the next generation about the importance of energy efficiency by providing an energy-focused curriculum and assembly-style presentation, energy efficiency kit materials for elementary and high school students to install with their parents at home, and mini-grants for teachers who achieve the most student participation. PNM has distributed over 26,000 kits since 2014 and has achieved approximately 10 million kWh in energy savings.

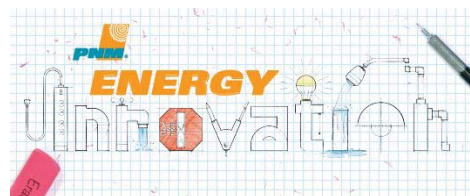


"...Santa Fe Public Schools thanks PNM for bringing exciting lessons to our fifth grade students and teaching them how they can make an impact in conserving our natural resources for a lifetime."
Jeff, teacher, Santa Fe Public Schools

"The students shared with me how much they enjoyed their session!
We appreciate the time spent with our children."
Rebecca, teacher,
Isleta Elementary School



Photo courtesy Albuquerque Journal



Talk to us.



Energy efficiency 2007-2017 costs and benefits

(Residential and business programs)

Effective energy efficiency and load management programs yield savings from avoided fuel and capacity costs that are greater than the cost of the programs themselves and help utilities defer building new resources. The programs also provide environmental benefits from reductions in power plant emissions and water use. Jobs creation is an additional benefit.

Total Program Costs

\$186 million

Present Value of Avoided Costs

(Fuel and Capacity Cost)

\$411 Million

Total Cumulative Energy Savings

3,100 Gigawatt-hours = Energy used by
470,000 average homes in a year

Total Carbon Emissions Avoided

2,000,000 metric tons = emissions of
428,000 vehicles for a year

Total Water Use Avoided

913 Million Gallons



Programs that benefit those most in need

A significant portion of the PNM energy efficiency program portfolio focuses on low income customers. Over the past ten years, PNM has positively impacted thousands of income-qualified customers through installation of efficient lighting and other measures, ENERGY STAR refrigerator replacement, and providing full weatherization services in their homes. PNM typically exceeds the minimum 5% funding requirement on low income program offerings to reach as many customers as possible across the PNM service area through non-profit agencies, community outreach, and targeted marketing.



"Thank you for the beautiful fridge. Now my baby has cold milk!"

Although the PNM Home Works, Refrigerator Recycling and Residential Lighting programs are not characterized as low income specific, it is likely that low income customers have benefited from these programs as well. The paragraph below is an email from a PNM customer about her experience with our Low Income Home Energy Checkup program and having her old and inefficient refrigerator replaced. PNM has replaced over 4,800 refrigerators through our low income programs.

"Sometimes as a single mom it's hard to buy brand new things or even nice things for your house. So, you make do with what you have. I have taught my children to appreciate everything that they have in life and everything given to them. I cannot express to you the amount of happiness that they all had when they came home from school today. They were so excited to see something brand-new in our house that's going to work, that we don't have to worry about it breaking down or leaking or freezing over all our food and we have to thaw everything out for hours. We are so grateful and humbled by this experience and we appreciate all that PNM has done..." Robyn, PNM residential customer



Talk to us.





Energy efficiency 2007-2017 program participation

Refrigerators Recycled

77,868

School Kits Provided

26,359

Low Income Kits Distributed

64,446

Low Income Refrigerators Replaced

4,809

Home Energy Checkups Completed

9,678

High Efficiency New Homes Built

2,539

High Efficiency Lighting Rebates

10,880,941

Business Customer Projects Completed

2,237 small business projects

2,558 large business projects

Programs that benefit small business customers

The PNM Quick Saver™ program is an incentive program that has been offered since 2009. This popular program is included as part of the PNM Commercial Comprehensive program and is geared towards helping the small business customer reduce their energy costs. Unlike large businesses, the small business customer does not typically have the time or resources available to them and must therefore be more vigilant and strategic in how they operate effectively and efficiently.

By participating in the Quick Saver™ program, customers receive substantial discounts for efficient lighting and refrigeration equipment upgrades passed on to them through the trade allies who install these measures. To date, PNM has distributed approximately \$12 million in incentives through the Quick Saver™ program and achieved approximately 66 million in kWh savings.

For example, the PNM Quick Saver™ Program covered 100 percent of the project cost for the nonprofit First Nations Community Healthsource (FNCH) in Albuquerque. The project generated an annual energy savings of 78,853 kWh resulting in an annual monetary savings of over \$7,885. FNCH can put these savings to good use, providing an additional 80 homeless adults and/or children with dental care, providing 40 well-child/women's or men's health exams to those lacking insurance, or providing necessary medications for 160 individuals without insurance at no charge. The cost, energy, and environmental impacts from this project are described in First Nations Community Healthsource case study which is also included at the end of this report.

Programs for multifamily properties and non-profits

The PNM Multifamily program began in mid-2015 and was put into place to address a hard-to-reach segment which includes property owners and tenants of both market and income-qualified multifamily buildings throughout the PNM service area. Through this program, property owners and trade allies receive rebates for upgrading their buildings with efficient lighting, ENERGY STAR® appliances, efficient HVAC equipment and other custom energy saving measures in both individual tenant units and property common areas. The Commercial Comprehensive program has provided tax exempt participants including non-profits, schools, and government entities over \$6 million in incentives and energy savings of approximately 76 million kWh.



Talk to us.





A complicated program like Multifamily takes time, patience, and persistence to gain traction and positively persuade all stakeholders involved to see the long term benefits of upgrading old inefficient equipment. This program has achieved success through innovative and creative trade ally and incentive campaigns, cost effective and attractive incentive structures, consistent follow-up with property managers and owners, and streamlining online application and other administrative processes.

Included at the end of this report is a multifamily case study highlighting the Santa Fe Civic Housing Authority project. The cost, energy savings, and environmental impacts are described in detail in this case study.

Programs that support trade allies

Trade allies play a significant role in making PNM programs successful. To date, we work with a total of approximately 500 trade allies across many of our programs which include retailers, contractors, and home energy raters just to name a few. Partnering with these trade allies not only assists our customers in making smart energy efficient choices in their homes and businesses, but it also supports the businesses themselves.

"The ability to work with a talented network of trade allies is critical to the overall success of the PNM Business Energy Efficiency Programs. The trade allies exponentially magnify the efforts of our small office staff. It is difficult to put into words how much the programs have benefited from the knowledge, dedication, and relationships that the trade allies bring to the table. The programs and our communities would not have been able to achieve the energy savings and environmental progress without our state-wide network of devoted trade allies."

Richard Snow, Marketing Specialist, DNV
GL, PNM Business Energy Efficiency
Programs Implementer

"Our participation as a Trade Ally with the PNM Energy Efficiency Business Programs has served our Company and Customers extremely well. We have nearly 20 Electricians and Technicians devoted to this program. Their efforts took off 7.5 Gigawatts from the grid last year alone saving our Customers \$750,000 per year in annual energy costs. These are savings they can use to hire new employees and expand their businesses. Without the support of PNM, many of these projects would not have come to fruition."

Craig Shaw, Managing Partner, Bulldog
Energy Solutions

Expressing our gratitude

PNM sincerely appreciates our customers, implementers, and trade allies and all other stakeholders who have made these programs so successful over the past ten years. We look forward to continued success now and in the future in keeping up with the ever changing energy efficiency industry by offering innovative and cost effective programs that benefit our customers, the environment, and the economy.



Talk to us.



PNM Quick Saver™

Case Study



First Nations Community Healthsource Albuquerque



Energy efficiency improvements at nonprofits like FNCH can qualify for support from PNM to cover up to 100% of project cost.

Nonprofit Savings Serve Many

For many businesses, saving almost \$8,000 a year in energy costs would be nice, but for Albuquerque-based First Nations Community Healthsource (FNCH), saving that money helps deliver services that truly transform and save lives. FNCH is a nonprofit community health and human services provider dedicated to being the healthcare home for more than 10,000 urban American Indians in Albuquerque along with other low-income, medically uninsured/underinsured and the homeless. It is also a federally qualified health center and the only Title V Urban Indian Health program in New Mexico.

FNCH delivers a wide range of services including medical and dental care, behavioral health, HIV/AIDS prevention and case management, diabetes education, youth education and mentoring, homeless outreach and case management and job coaching – all of which are delivered regardless of the clients' ability to pay. Every dollar the organization can save on operating costs is another dollar that can be put back into programs and services for the thousands of people who depend on them.

Project Profile

Retrofit Completion:August 2011

Project Cost:\$11,292.14

Percentage of Costs Covered by PNM:100%

Average Yearly Savings:\$7,885.28

Estimated Annual kWh Savings:78,853

To learn more about the
PNM Quick Saver™ Program,
please visit
www.PNMenergyefficiency.com

For information on all
PNM Business Energy Efficiency
Programs, please visit
PNM.com/bizrebates



Talk to us.



Energy Efficiency Improvements Implemented

A PNM Quick Saver contractor completed the three-phased lighting-focused project, removing 149 highly inefficient T12 fixtures and replacing them with energy efficient T8 fixtures.

Why improve energy efficiency?

- 1 Cuts your operating costs and improves profitability.
- 2 Reduces maintenance demands.
- 3 Distinguishes your business as being eco-friendly or “green.”
- 4 Allows you to use energy savings to finance business growth.
- 5 You get money from PNM when you do it.

The Power of Saving

FNCH maximizes every dollar it spends in order to serve as many people as possible. Here are some of the ways they can put an extra \$8,000 to use.

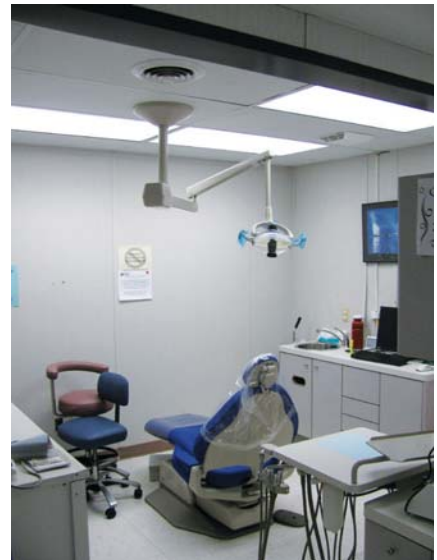
- 80 homeless adults and/or children could receive much-needed routine dental care
- 40 well-child, women's health or men's health exams could be provided to those who lack health insurance
- 160 individuals without insurance could be given necessary medication for free

A New Wellness and Healing Center

The clinic is in the process of opening its All Nations Wellness and Healing Center a few blocks from where the clinic is located. This center will host a variety of health promotion and disease prevention activities and other assistance opportunities with vocational, educational, and subsistence needs. The center's goal is to improve the health outcomes of American Indians and other under-served populations through community caring, self determination, connectedness and enculturation.

Customer Raves

“Our facility is open more than 60 hours a week, and our lighting was really inefficient. PNM Quick Saver™ covered 100 percent of the project costs and improved our lighting efficiency dramatically, allowing us to immediately start putting money back into our programs. From finding a contractor to the final inspection, it was so easy to complete the project with help from PNM,” said Chief Executive Officer, Linda Son-Stone.



To learn more about the PNM Quick Saver™ Program, please visit www.PNMenergyefficiency.com

For information on all PNM Business Energy Efficiency Programs, please visit PNM.com/bizrebates



Talk to us.



PNM Multifamily Energy Efficiency Program



Paseo Del Sol Apartments, Santa Fe



Paseo Del Sol Apartments

Free Energy Audit Reveals Unexpected Opportunities

Santa Fe Civic Housing Authority (SFCHA), manager of Paseo Del Sol apartments, was considering improving the complex's common area lighting. However, after the PNM Multifamily Upgrade program's free basic audit was conducted, SFCHA found more energy- and cost-saving opportunities. SFCHA implemented improved site lighting and in-unit LED conversions, which means less maintenance and lower energy bills for all. Best of all, by converting to long-life, non-mercury containing LED lighting, SFCHA has eliminated mercury hazards at the site and reduced atmospheric mercury emissions and landfill waste.

Project Financials

Project Cost:	\$45,581
PNM Rebate:	\$21,368
Annual Energy Savings (kWh):	98,777 kWh
Annual Utility Cost Savings:	\$10,865
Annual Water Savings (Gallons): ..	180,000
Annual CO₂ Savings (Metric tons):	75
Project Completed:	2016

Upgrades with a Community Focus

SFCHA always has the larger community in mind. With the upgrades, SFCHA has reduced carbon dioxide emissions by 75 tons per year, and water use by over 180,000 gallons per year. With a very quick simple payback of only 2.4 years, SFCHA can reinvest the savings into improving housing throughout Santa Fe.

Award Winner:

Service Electric Co. won the 2016 PNM Multifamily Trade Ally Community Award for their service to the residents of Paseo del Sol and other Santa Fe Civic Housing Authority Properties. Their commitment to improving our communities through energy efficiency is rarely paralleled.



Talk to us.



Why improve energy efficiency?

- 1 Cuts your operating costs and improves profitability.
- 2 Reduces maintenance demands.
- 3 Distinguishes your business as being eco-friendly or “green.”
- 4 Allows you to use energy savings to finance business growth.
- 5 You get money from PNM when you do it.

Energy Efficiency Improvements Implemented

Highlights of the Paseo Del Sol energy efficiency retrofit:

- LED Pole-Mount Lighting
- LED Wall-Mount Lighting
- In-Unit LED Lighting

Additional Benefits:

- Reduced lighting maintenance improves operational efficiency
- With stronger lighting comes increased safety for residents
- Increased tenant comfort and lower energy bills reduces turnover

Annual Energy Savings

The installed energy efficiency measures at Paseo Del Sol will provide estimated annual energy savings of 39,578 kWh for the owners and 51,199 kWh for tenants. For this effort, Paseo Del Sol will achieve full payback in less than three years, with a return on investment of 312%! In addition, the energy savings correspond to a reduction of 75 metric tons of carbon dioxide, and 180,000 gallons of water

Annual CO2 savings equivalent

15 cars off the road



Annual water savings equivalent

8 swimming pools



Customer Raves

“The [PNM Multifamily Energy Efficiency] Program allowed us to expand scope and direct more benefits toward our tenants.”

“Lower operating costs equals dollars back into the community.”

– David Martinez, SFCHA

To learn more about the PNM Retrofit Rebate Program, please visit www.PNMenergyefficiency.com

For information on all PNM Business Energy Efficiency Programs, please visit PNM.com/bizrebates



Talk to us.

