2007
Electric Energy Efficiency and Load Management Program Plan

Public Service Company of New Mexico (PNM)

January 31, 2007

I. Executive Summary

PNM is proposing to offer to its retail electric customers six new residential and three new commercial electric energy efficiency or load management programs. These programs are being proposed under the Efficient Use of Energy Act ("Act") and consistent with the Energy Efficiency Rule ("Rule"). PNM is proposing these programs be made available to the customers receiving service under PNM's Residential Service 1A & 1B, Small Power Service 2A & 2B, General Power Service 3B, Large Power Service 4B, Large Service for Public Universities 15B, Large Service for Manufacturing 17B, Special Contract Service for Large Customers 23, and Large Service for Manufacturing - Distribution Level 30B; and PNM's TNMP Services Residential Service 1, General Service 2, Large General Service 3, School Service 5 and Municipal Power Service 12.

The residential programs include a refrigerator recycling program, a compact fluorescent lighting ("CFL") program, an indirect evaporative cooling program, an ENERGY STAR® Homes program, an energy savers direct install kit, and a refrigerated air conditioning load management program. The commercial programs consist of an efficient lighting program, a commercial indirect cooling program, and a commercial load management program. PNM intends to offer the efficiency programs for at least three years, and the load management programs for ten years. These programs were designed to allow for broad participation among eligible customer classes. The programs were selected based on cost-effectiveness and their potential energy and/or demand savings.

The energy consumption and demand of PNM's electric customers has been rapidly increasing. PNM projects that its retail load will increase by 400 MW by 2016, which will require the addition of new supply resources. These programs offer the potential to significantly reduce the energy consumption and peak demand of PNM's retail customers. If PNM is able to achieve participation targets, the energy savings in 2010 will account for 17% of energy growth and 40% of load growth.

The projected first year budget for the proposed programs is $7,546,884. This equates to a 1.277% impact on eligible customers' bills. The Total Resource Cost test for the set of programs is 1.39. The annual energy savings associated with these programs is 26 GWh. The peak delivered capacity of the load management programs is 63 MW.

PNM convened and held several meetings with an Electric Energy Efficiency Public Advisory Group ("Advisory Group") to solicit recommendations at every stage of the design process. Members of this group included Commission Staff, the Attorney General, EMNRD, Coalition for Clean, Affordable Energy, Community Action New Mexico, MFA, the AARP, New Mexico Industrial Energy Consumers, the Natural Resource Defense Council, the Southwest Energy Efficiency Project, the NM Shareholders Alliance, and Xcel. PNM considered very carefully the group's recommendations.

II. Overview

A. Introduction

This document contains the description and rationale for selection of the seven energy efficiency programs and two load management programs proposed by PNM for its retail electric customers in New Mexico, including customers in the former TNMP service territory. The program descriptions include customer participation estimates, energy savings, cost-effectiveness testing results and all program assumptions.

B. Existing Programs

There are currently no PNM sponsored electric energy efficiency incentive programs.

C. Proposed New Programs

PNM is proposing the following programs for residential and commercial electric customers.

1. Residential

(1) The Residential Lighting program will provide incentives for purchasing compact fluorescent lighting ("CFL"). Lighting is the single largest area of energy efficiency potential.

(2) The Refrigerator-Recycling program is designed to encourage early retirement of old refrigerators or unnecessary second refrigerators.

(3) The Residential Indirect Cooling program provides an incentive to upgrade single-inlet evaporative coolers with an advanced indirect cooling module. Indirect cooling improves the performance of evaporative coolers and offers an alternative to refrigerated air conditioners.

(4) The ENERGY STAR® Homes program will provide residential builders with an incentive for homes built to the ENERGY STAR standards.

(5) The Energy Saver Kit Direct-Install program will install a set of efficiency measures free of charge for income-qualified customers (up to 200% of the federal poverty level). The New Mexico Mortgage Finance Authority ("MFA") will administer this program.

(6) The Residential Load Management program is a demand side management ("DSM") strategy whereby non-critical residential loads (refrigerated air conditioning units, pool pumps, etc.) are cycled on and off during summer peak times.

2. Commercial

(7) The Commercial Lighting program will provide incentives to replace existing lighting with CFLs, high efficiency fluorescent lamps and other energy efficient lighting and control options.

(8) The Commercial Indirect Cooling program provides incentives to either upgrade a single-inlet evaporative cooler with an advanced indirect cooling module or install a packaged 100% indirect cooling system.

(9) The Commercial Load Management program is a DSM strategy whereby tailored curtailment and load management strategies will be used to provide firm demand response capacity in the commercial and industrial segments.

D. Program Rationale and Selection Criteria

The list of candidate energy efficiency programs came from a study completed for PNM by Itron, Inc. in September 2006 ("Potential Study"). The threshold test for program consideration was cost effectiveness, as measured by the Total Resource Cost Test ("TRC"). In addition to cost effectiveness, PNM also considered the criteria shown below, which are contained in the recently approved Rule, which becomes effective March 1, 2007.

1) Cost effectiveness – all programs being proposed are cost effective and have a TRC exceeding 1.0
2) Additional selection criteria
    i. System benefits – all of the selected programs deliver system benefits through savings in demand and energy. The magnitude of the benefit for each program is related to the total amount of savings which is discussed under item iv below. In addition, the load management programs offer the additional benefit to all of PNM's customers of providing dispatchable load.
    ii. Broad participation potential – the portfolio of programs was constructed to provide the opportunity for broad participation among eligible customer classes. PNM selected programs that are either low-cost to customers (Residential Lighting) or no-cost programs (Refrigerator Recycling, Energy Saver Kit Direct Install) to try to achieve broad participation among residential customers. Almost every commercial or industrial customer will be eligible to participate in the commercial lighting or commercial load control program.
    iii. TRC test results – please see the Program Budgets and TRC Results section below.
    iv. Total estimated energy & demand savings – Lighting, refrigerator retirement, and cooling accounted for most of the energy and demand savings among residential customers according to the Potential Study[1]. Lighting accounts for the vast majority of energy (84%) and demand (76%) potential savings among commercial customers. Consequently, PNM is proposing programs targeting these end uses in its initial set of programs. In an effort to improve the energy efficiency and to reduce the demand of new homes, PNM is also proposing an ENERGY STAR homes program and an indirect cooling program. Collectively, the proposed programs have the potential to reduce peak demand by 64 MW and total energy consumption by 84 GWh in 2010.
    v. Existence of substantial non-energy benefits – The Energy Saver Kit program provides significant non-energy benefits in the form of assistance to lower income residents. The customers will benefit from increased comfort through installation of the kits which would not have been installed without the program. The Refrigerator Recycling program provides significant non-energy benefits to the environment by recycling all materials contained in the refrigerators.

[1] Public Service New Mexico Electric Energy Efficiency Potential Study Exhibits 4-12 thru 4-15.

vi. Administrative ease of program deployment – For the most part, PNM selected programs that have a proven track record at other utilities. Additionally, third party contractors experienced with specific programs will be used to implement four of the programs. This should ease implementation and take advantage of experience that exists in the market.

vii. Overall portfolio development considerations – The portfolio is comprehensive and includes programs that address both energy and demand consideration, as well as programs targeted to residential, commercial, and industrial customers.

viii. Performance risk of the technologies – None of the products selected use unproven technology. The Residential Indirect Cooling program, however, promotes a product that has seen very little application but shows great potential as an alternative to refrigerated air conditioning. Given the significant impact of air conditioning it was considered a prudent risk to promote this product.

E. Public Advisory Process

PNM solicited input from the Advisory Group at several points during the development of the proposed programs. The Advisory Group provided significant input into the Potential Study through reviews of the methodology and measure lists and comments on the final output and presentation format. The Advisory Group members consisted of representatives from NMPRC ("PRC") Staff, the Attorney General, the New Mexico Energy, Minerals, and Natural Resources Department, NMMFA, AARP, Community Action New Mexico, SWEEP, NRDC, MFA, Siemens and CCAE. Several meetings were held with the Advisory Group:

- February 22, 2006 – PNM held a kick off meeting to present the program development process and describe the methodology to be employed in the performance of the appliance saturation study and the potential study after selecting contractors to perform these two studies. Itron and PNM presented the initial list of efficiency measures to be considered for comment by the Advisory Group. Several members of the Advisory Group recommended additions and refinements to the measure list that were subsequently adopted.
- July 19th, 2006 – PNM and Itron presented interim results from the appliance saturation study mail surveys, discussed preliminary results from our baseline analyses, and presented key data issues associated with measures unique to the PNM service territory (e.g. evaporative coolers and advanced windows) for feedback from the Advisory Group.
- September 6th, 2006 - PNM and Itron presented a draft of the final potential study and solicited comments from the Advisory Group. Several Advisory Group members offered comments suggesting refinements to the presentation and discussion of the modeling results, as well as additional analyses related to evaporative cooling and home electronics to supplement the core potential forecasts. It was also suggested that the Potential Study results be presented in comparison to PNM's load forecast. These suggestions were incorporated into the final report.
- November 21, 2006 - The draft 2007 Electric Energy Efficiency Program Plan was presented to the group for review and comment. Significant recommendations were received from SWEEP and other parties. Many of these recommendations were incorporated, including: increasing the participation targets for residential lighting and refrigerator recycling in line with other utilities'

experience with out-sourced programs; providing multiple year participation targets; and including the commercial sector in the indirect cooling program.

In summary, PNM conducted a rigorous Public Advisory Group process, and incorporated many of the suggestions raised by the parties. The process began at an early stage of program development to allow the group members to shape the filing from the very beginning. While PNM did not incorporate every suggestion, PNM did give careful consideration to every member's recommendation. PNM believes there is general agreement among the parties about the viability of the programs being proposed.

F. Program Goals

The primary long-term goal of the set of proposed programs is to induce lasting structural and behavioral changes in the marketplace, which will result in the increased adoption of energy-efficient technologies. This is accomplished by promoting the purchase of energy efficient products and services, increasing customer awareness of energy efficiency measures and providing incentives to change behaviors. The proposed programs will address these objectives by:

- Implementing promotional campaigns that increase customer awareness of energy efficiency products and benefits
- Using rebates to eliminate the over-emphasis on first cost vs. operating costs
- Facilitating the rebate process to make participation simple for customers
- Broadening our low income program to enhance customer awareness of energy efficient products

Achieving these long-term goals requires an aggressive promotional effort. Promotions will utilize multiple channels to increase customers' awareness. The participating retailer and contractor networks are important partners for a successful program. Information and training will be provided to retailers and contractors to help build awareness and participation in the vendor community. There are many community-based organizations that have an interest in energy efficiency and their support will be solicited to help educate and inform customers.

Providing access to information about cost-effective energy efficiency measures is an important step to help overcome some of the market barriers to improving energy efficiency. These barriers include the cost and effort of searching for information, the uncertainty of performance and the initial cost of installing measures. Availability of the new programs will give customers confidence that these measures can indeed save energy and the rebate incentive will help overcome the cost barrier. Successful programs will result in greater consumer demand for energy efficiency products and services in New Mexico. This in turn will help stimulate the market for energy efficiency products as retailers and contractors respond to the increased consumer demand.

PNM has established customer participation and energy savings targets for each program in the near-term. These targets are shown in the table below for the first full three years:

Program Participation and Savings Targets (incremental)

Program	2008 Cust.	2009 Cust.	2010 Cust.	2008 kWh (or MW)	2009 kWh (or MW)	2010 kWh (or MW)
Refrigerator Recycling	10,000	10,000	10,000	6,169,495	6,169,495	6,169,495
Residential Lighting *	65,167	70,833	70,833	12,818,828	13,933,509	13,933,509
Residential Indirect Cooling	100	125	150	129,200	161,500	193,800
ENERGY STAR Homes	400	500	600	415,240	519,050	622,860
Energy Saver Direct Install	1,500	1,500	1,500	862,200	862,200	862,200
Res. Load Management	6,818	17,045	23,864	8	19	26
Commercial Lighting *	375	450	485	5,655,201	6,786,241	7,314,060
Commercial Indirect Cooling	50	60	70	96,900	116,280	135,660
Comm. Load Management	NA	NA	NA	23	26	29

** Assuming 6 units per home and 200 units per business*

G. Program Budget and TRC Results

As the tables below demonstrate, the proposed first full year budget for the set of programs is $7,546,884 and the projected TRC for the portfolio of programs is 1.39. The table also highlights some of the program assumptions and TRC calculations Participation targets are in terms of number of units installed or rebated. The cost/kWh for the energy saved is only 1.9 cents/kWh, and the cost/kW for demand reductions associated with the load management programs is only $111/kW and $101/kW, respectively. This compares very favorably with PNM's current estimate for peaking capacity of between $900/kW and $1250/kW.

Program Budget and TRC Results

Program	First Year Part. (Unit) Target	Lifetime kWh Saved	Total Program Budget	TRC	Cost / kWh Saved	Levelized Cost / kW
Refrigerator Recycling	10,000	61,694,952	$ 1,511,153	2.69	$ 0.024	NA
Residential Lighting	391,000	102,550,626	$ 1,349,327	1.60	$ 0.013	NA
Residential Indirect Cooling	100	2,067,200	$ 89,577	2.09	$ 0.043	NA
ENERGY STAR Homes	400	12,457,200	$ 295,766	1.48	$ 0.024	NA
Energy Saver Direct Install	1,500	6,897,600	$ 525,455	1.25	$ 0.076	NA
Total Residential EE		**185,667,578**	**$ 3,771,278**	**1.80**	**$ 0.020**	NA
Commercial Lighting	75,000	39,586,406	$ 518,382	1.77	$ 0.013	NA
Commercial Indirect Cooling	50	1,550,400	$ 79,618	1.11	$ 0.051	NA
Total Commercial EE		**41,136,806**	**$ 598,000**	**1.70**	**$ 0.015**	NA
Res. Load Management	7.5MW	NA	$ 823,852	1.29	NA	$111
Comm. Load Management	22.5MW	NA	$ 2,353,754	1.37	NA	$101
Total		**226,804,384**	**$ 7,546,884**	**1.39**	**$ 0.019**	

Energy efficiency programs focus on saving energy primarily. Any demand savings are incidental to the saved energy. Load management programs, on the other hand, are focused on providing dispatchable demand reductions. The following tables present the projected annual budgets and target demand reductions for the life of the load management program contracts. (Please see Section XII for the Load Management Contract Details)

Load Management Program Budget

Program	2008	2009	2010	2011	2012
Residential Program					
Dispatchable kW	7,500	18,750	26,250	32,250	32,250
Annual Cost	$ 823,852	$ 1,927,708	$ 2,668,193	$ 3,897,192	$ 3,897,192
Commercial Program					
Dispatchable kW	22,500	26,250	28,750	30,750	30,750
Annual Cost	$ 2,353,754	$ 2,667,292	$ 2,902,807	$ 3,306,008	$ 3,306,008

Program	2013	2014	2015	2016	2017
Residential Program					
Dispatchable kW	32,250	32,250	32,250	32,250	32,250
Annual Cost	$ 3,897,192	$ 3,897,192	$ 3,897,192	$ 3,897,192	$ 2,194,392
Commercial Program					
Dispatchable kW	30,750	30,750	30,750	30,750	30,750
Annual Cost	$ 3,306,008	$ 3,306,008	$ 3,306,008	$ 3,306,008	$ 2,738,408

H. 10 – Year Outlook

The following tables present the projected dispatchable demand achieved, and the energy and demand reduction for each of the proposed programs over a 10-year period. These estimates assume a three-year offering period, although the efficiency programs may be offered for a longer period if they continue to be well subscribed. These projections are consistent with the three-year targets shown in the Program Goals section. While these tables show flat energy and demand savings beyond 2010, PNM anticipates offering new programs as these programs are withdrawn, but cannot predict today the resulting savings until the replacement programs are identified. After three years (2010) the projected annual savings of the programs are 84 GWh/yr, annual demand savings are 9 MW and the dispatchable load is 55 MW.

Projected 10 Year Savings and Budgets

	2008	2009	2010	2011	2012
Residential Programs					
Annual kWh Saved	20,394,963	42,040,718	63,822,582	63,822,582	63,822,582
Annual kW Saved	1,838	3,819	5,888	5,888	5,888
Dispatchable kW	7,500	18,750	26,250	32,250	32,250
Total Residential Budget	$ 4,595,130	$ 5,816,550	$ 6,616,950	$ 3,897,192	$ 3,897,192
Commercial Programs					
Annual kWh Saved	5,752,101	12,654,622	20,104,342	20,104,342	20,104,342
Annual kW Saved	952	2,093	3,333	3,333	3,333
Dispatchable kW	22,500	26,250	28,750	30,750	30,750
Total Commercial Budget	$ 2,951,753	$ 3,358,710	$ 3,640,602	$ 3,306,008	$ 3,306,008
Total Programs					
Annual kWh Saved	26,147,064	54,695,339	83,926,923	83,926,923	83,926,923
Annual kW Saved	2,790	5,913	9,220	9,220	9,220
Dispatchable kW	30,000	45,000	55,000	63,000	63,000
Total Budget	$ 7,546,884	$ 9,175,260	$ 10,257,552	$ 7,203,200	$ 7,203,200

	2013	2014	2015	2016	2017
Residential Programs					
Annual kWh Saved	63,822,582	63,822,582	63,822,582	63,822,582	63,822,582
Annual kW Saved	5,888	5,888	5,888	5,888	5,888
Dispatchable kW	32,250	32,250	32,250	32,250	32,250
Total Residential Budget	$ 3,897,192	$ 3,897,192	$ 3,897,192	$ 3,897,192	$ 2,194,392
Commercial Programs					
Annual kWh Saved	20,104,342	20,104,342	20,104,342	20,104,342	20,104,342
Annual kW Saved	3,333	3,333	3,333	3,333	3,333
Dispatchable kW	30,750	30,750	30,750	30,750	30,750
Total Commercial Budget	$ 3,306,008	$ 3,306,008	$ 3,306,008	$ 3,306,008	$ 2,738,408
Total Programs					
Annual kWh Saved	83,926,923	83,926,923	83,926,923	83,926,923	83,926,923
Annual kW Saved	9,220	9,220	9,220	9,220	9,220
Dispatchable kW	63,000	63,000	63,000	63,000	63,000
Total Budget	$ 7,203,200	$ 7,203,200	$ 7,203,200	$ 7,203,200	$ 4,932,800

The projected cumulative impact of these programs is significant. The following table compares the savings to the PNM load forecast[2] including TNMP-NM. The combined energy efficiency and load management programs will mitigate 17% of energy growth and 40% of demand growth in 2010.

[2] PNM Preliminary 2007 Long Range Plan, December 2006.

PNM Energy and Demand Forecast

	2007	2008	2009	2010	2011
Total Retail Sales (GWh)	9,789	10,087	10,285	10,456	10,606
Annual Growth (GWh)		297	198	171	149
Energy Efficiency Savings (GWh)		26	29	29	NA
Savings as Percent of Growth		9%	14%	17%	0%
Total Retail Demand (MW)	1,726	1,779	1,822	1,855	1,885
Annual Growth (MW)		53	43	33	30
Energy Efficiency Savings (MW)		3	3	3	NA
Load Management Dispatchable Load (MW)		30	15	10	8
EE & LM Savings as Percent of Growth		62%	43%	40%	27%

I. Tariff Rider and Customer Bill Impact

All PNM customers receiving residential electric service are eligible for the residential energy efficiency and load management programs. All non-residential PNM customers receiving electric service under Rate Schedules 2A, 2B, 3B, 4B, 15B, 17B, 23B and 30B, and Public Service Company of New Mexico TNMP Services Rate Schedules 1, 2, 3, 5, and 12 are eligible to participate in the commercial energy efficiency and load management programs. The total proposed annual energy efficiency and load management budget for all classes in year one is $7,546,884. The estimated impact to each customers bill is 1.277%. PNM intends to implement the charges on a percent of bill basis subject to PRC approval.

The estimated impact of the tariff rider is for the first year's costs only. PNM will file annual reports on the program at which time projected participation rates, budgets and tariff impacts will be revised as required by 17.7.2.12 NMAC, for the next year. Based on first year participation targets, PNM will not exceed the 1.5% cap included in the Act. If these programs achieve targeted participation, the costs in 2010 and beyond may exceed the cap. PNM will be able to better assess the likelihood of exceeding the cap after the programs are implemented and it can gauge customer participation rates. If it appears the cap will be exceeded, it will notify the Commission in its annual report.

III. Program Cost / Benefit Analysis

A. TRC Analysis –Inputs and Results

The Act establishes the TRC as the standard to be used in determining whether or not efficiency or load control measures are cost-effective. The TRC involves a comparison of the present value of the savings to the costs of an efficiency or load control program. Any program that achieves a TRC of 1.0 or greater is considered to be cost-effective.

PNM performed the TRC calculations for the efficiency programs using the GDS Associates Screening Tool. This tool is an updated version of the tool that PNM used in NMPRC Case No. 05-00261-UT. The TRC calculations for the load management programs were performed using a spreadsheet analysis. Economic and avoided cost assumptions are provided in Section VIII to this document.

The following set of tables presents the program-specific inputs and the program-level results from the energy efficiency and load management TRC analyses. All of the proposed programs pass the TRC test and show significant electric savings potential. (Please see Section XII for the TRC analysis output table.)

B. Program TRC Results

The following table presents the summary results of the TRC calculation for each energy efficiency and load management program including annual energy savings, present value of the costs and benefits (savings) over the life of the program, and the TRC.

Program TRC Results

Program	Ann. kW Saved	Ann. kWh Saved	Present Value Costs	Present Value Benefits	TRC
Refrigerator Recycling	812	6,169,495	$ 1,211,153	$ 3,261,948	2.69
Residential Lighting	634	12,818,828	$ 2,639,627	$ 4,236,333	1.60
Residential Indirect Cooling	106	129,200	$ 109,577	$ 228,752	2.09
ENERGY STAR Homes	244	415,240	$ 990,966	$ 1,463,534	1.48
Energy Saver Direct Install	43	862,200	$ 525,455	$ 654,574	1.25
Total Residential EE	**1,838**	**20,394,963**	**$ 5,476,778**	**$ 9,845,141**	**1.80**
Commercial Lighting	872	5,655,201	$ 1,257,882	$ 2,230,457	1.77
Commercial Indirect Cooling	79	96,900	$ 154,618	$ 171,564	1.11
Total Commercial EE	**952**	**5,752,101**	**1,412,500**	**2,402,021**	**1.70**
Res. Load Management *	32,250	NA	19,183,266	24,661,390	1.29
Comm. Load Management *	30,750	NA	19,550,044	26,718,638	1.37
Total	**65,790**	**26,147,064**	**$ 45,622,588**	**$ 63,627,190**	**1.39**

** Load Management costs and benefits are 10 years*

Inputs to the TRC calculation include development costs, program level inputs, program benefits, and program costs. Development costs include studies to determine the application potential of various efficiency measures, labor to select and design programs and consulting fees to perform studies, assist in development, and to provide regulatory application support. Program level inputs include the life of the measure, energy savings, incremental costs and anticipated participation rates. Benefits include avoided

energy and capacity costs. Program costs include the cost of each measure, administrative costs, third party implementation costs, promotional costs, and Measurement & Verification ("M&V") costs. Development costs, program level inputs, program costs and participation rates are discussed below.

1. Development Costs

The table below identifies the development costs for the proposed programs. These costs consist of the 2006 labor of the PNM Energy Efficiency Department to identify, select, and design the programs, consulting fees paid to SRBI for the design and implementation of an appliance/efficiency saturation study, consulting fees paid to Itron for the potential study and regulatory support, and consulting fees paid to Paragon Consulting for support in the design and execution of the load control RFP process, including contract negotiations. As these costs are all one-time charges, PNM proposes to amortize and recover them over a three-year period. With the exception of Paragon, these costs are common to all programs and are allocated equally among the energy efficiency programs. The Paragon Consulting costs are directly attributable to the load management programs and are charged only to those programs. They are allocated between the two load management programs based on projected capacity savings.

Devlopment Cost Type	Cost
Development Labor Cost	$ 65,015
SRBI Appliance Saturation Survey	$ 141,177
Itron Potential Study and Consulting	$ 174,027
Paragon Consulting	$ 46,606

2. Program Level Inputs

The following table presents the program level inputs used in the TRC analysis. The inputs include measure life, per unit energy and demand savings, incremental participant costs and forecasted participation rates. Measure life, energy savings and incremental participant costs are all based on the Potential Study (Please see Section IX – Program Performance Assumptions).

Several factors were considered in estimating the participation targets. PNM began by considering the participation potential identified in the Potential Study. PNM also asked respondents to RFPs to estimate achievable targets for the programs addressed in the RFPs. PNM obtained information from homebuilders and contractors about the programs that target new home construction or are delivered in cooperation with contractors. PNM also considered participation rates at other utilities. Participant costs of a particular measure were also a factor in estimating participation levels.

Consistent with the assumptions for incentive levels in the Potential Study, incentives or rebates are set at between 25% and 50% of the incremental cost. Specific criteria used to set the incentive levels for each program are discussed under the Program Details section of this plan.

Program Inputs

Program	Measure Life	Annual kWh Savings / Unit	Annual Peak kW Savings / Unit	First Year Part. (Unit) Target	Incr. Cost / Unit	Per Unit Incentive
Refrigerator Recycling	10	663	0.087	10,000	$ -	$ 30
Residential Lighting	8	48	0.002	391,000	$ 5	$ 2
Residential Indirect Cooling	16	1,292	1.056	100	$ 550	$ 350
ENERGY STAR Homes	30	1,483	0.870	400	$ 2,238	$ 500
Energy Saver Direct Install	8	575	0.028	1,500	$ -	$ 300
Commercial Lighting	7	188	0.029	75,000	$ 15	$ 5
Commercial Indirect Cooling	16	1,938	1.584	50	$ 2,000	$ 500

3. Program Costs

The following table presents the detailed components of the program costs including administration, third party implementation, promotion, M&V and incentives. Please see the discussion below for a description of the allocation methods.

Program Costs

Program	Total Incentives	Internal Admin.	Third-Party Delivery	Promotion	M&V	Total Cost
Refrigerator Recycling *	$ 300,000	$ 42,534	$ 1,050,000	$ 56,833	$ 61,786	$ 1,511,153
Residential Lighting *	$ 664,700	$ 42,534	$ 461,000	$ 125,923	$ 55,170	$ 1,349,327
Residential Indirect Cooling	$ 35,000	$ 44,284	$ -	$ 6,631	$ 3,663	$ 89,577
ENERGY STAR Homes	$ 200,000	$ 45,784	$ -	$ 37,889	$ 12,093	$ 295,766
Energy Saver Direct Install	$ 450,000	$ 42,534	$ -	$ 21,954	$ 10,966	$ 525,455
Total Residential EE	**$ 1,649,700**	**$ 217,671**	**$ 1,511,000**	**$ 249,229**	**$ 143,678**	**$ 3,771,278**
Commercial Lighting	$ 375,000	$ 47,534	$ -	$ 47,598	$ 48,250	$ 518,382
Commercial Indirect Cooling	$ 25,000	$ 44,034	$ -	$ 3,173	$ 7,411	$ 79,618
Total Commercial EE	**$ 400,000**	**$ 91,568**	**$ -**	**$ 50,771**	**$ 55,660**	**$ 598,000**
Res. Load Management	NA	$ 39,375	$ 749,477	NA	$ 35,000	$ 823,852
Comm. Load Management	NA	$ 65,625	$ 2,183,129	NA	$ 105,000	$ 2,353,754
Total	**$ 2,049,700**	**$ 414,240**	**$ 4,443,606**	**$ 300,000**	**$ 339,338**	**$ 7,546,884**

** Third-party delivery cost includes additional promotion costs*

4. Minimum Participation Levels

The Act requires that a utility's portfolio of programs be cost effective. To estimate the minimum participation that would be required to achieve a cost-effective portfolio, PNM estimated program participation levels that would result in each individual program being at the TRC threshold of approximately 1.0. Should the actual participation rates be below the targeted levels, the effective TRC would be less. The following table shows the approximate minimum participation levels needed to maintain a TRC of 1.0 for the programs. The values are approximate due to the interrelation of costs among all programs.

Minimum Participation Rates

Program	First Year Part. (Unit) Target	Lifetime kWh Saved	Total Program Budget	TRC
Refrigerator Recycling	240	1,480,679	$ 84,866	1.01
Residential Lighting	130,000	34,096,116	$ 960,403	1.01
Residential Indirect Cooling	33	682,176	$ 68,599	1.00
ENERGY STAR Homes	50	1,557,150	$ 95,150	1.00
Energy Saver Direct Install	650	2,988,960	$ 282,214	1.01
Total Residential EE	**130,973**	**40,805,081**	**$ 1,491,232**	**1.01**
Commercial Lighting	4,500	2,375,184	$ 88,355	1.01
Commercial Indirect Cooling	45	1,395,360	$ 88,355	0.99
Total Commercial EE	4,545	3,770,544	$ 176,710	1.00
Res. Load Management	3 MW	NA	$ 416,319	1.00
Comm. Load Management	3.3 MW	NA	$ 485,337	1.00
Total	**135,518**	**44,575,625**	**$ 1,667,942**	**1.01**

C. Program Costs Allocation

This section explains the methods and rationale used to allocate program costs to the various programs. The major cost categories are administration, third-party implementation, promotion and M&V.

1. Administration

Administrative costs include labor, incidental costs (travel and supplies), and rebate processing costs. The labor cost represents 40 % of the total on-going budget for the PNM energy efficiency program, and is based on PNM's estimate of the time that will be needed to administer, track, and report on these programs, and the time necessary to interact with third party providers and stake holders on an on-going basis. Administrative labor costs have been allocated equally across the new energy efficiency programs. Because PNM believes that the time devoted to these programs will be approximately equal and not related to a programs' direct costs. On-going administration of the load management programs will require one new full-time staff member and this cost has been assigned directly to these programs. The rebate processing costs were based on the cost structure of the existing contract for processing rebates for the gas efficiency programs. Rebate processing costs only apply to those programs for which customers will submit rebate forms; the Residential Indirect Cooling program, the ENERGY STAR Homes program, the Commercial Lighting program, and the Commercial Indirect Cooling program.

2. Third Party Implementation

These are the costs to engage a third party contractor to implement a particular program on behalf of PNM. The Refrigerator Recycling program, the Residential Lighting program, the Residential Load Management program and the Commercial Load Management program will be implemented through the use of third party providers. The costs of these programs are allocated directly to the specific program selected through the RFP Process.

The third party contracts are comprehensive, with the third party assuming responsibility for marketing, customer subscription, tracking, and reporting results., The contractor's

marketing material design and implementation, is subject to PNM approval. The programs will be presented as PNM programs to customers. PNM chose to implement these particular programs through third parties for the reasons presented in later sections in this Plan.

3. Promotion

PNM anticipates promoting these programs through the use of walk-in office posters, brochures (including rebate forms), print media (including direct mail), radio and possibly a small amount of television. Third party contractors are responsible for marketing the programs they administer, but PNM anticipates including information about these programs in some of its marketing materials. Promotional costs were estimated based on the promotional mix shown in Section X. Brochure and print media costs are allocated based on the total projected incentive cost for each program, consistent with the Rule. Radio is allocated solely to the residential programs and split among residential programs based on projected incentive cost. No print or radio promotional costs are allocated to the Energy Savers Kit program as MFA conducts an extensive outreach program as described in Section XI to the Plan.

Additionally, PNM will take advantage of current communication channels to promote these programs. Examples include use of the bill insert, the call center and walk-in offices.

4. M&V

The budget for measurement and verification for the new residential programs, as a percentage of total residential program budget, is estimated at 4%. This figure is based on research PNM conducted for its initial gas energy efficiency filing and was confirmed in the RFP process for the independent evaluator. The cost for M&V for the new commercial programs, as a percentage of the total commercial program cost, is expected to be about 10%. The higher percentage is due to the smaller more diverse target market and the need to spend more time assessing the impact of commercial measures.

IV. Promotional Approach

The success of the new energy efficiency programs will rest in large part on an effective marketing and promotional campaign. The campaign should encourage customers to participate in the programs as well as educate customers about energy efficiency. Adequate promotional support will be crucial to the programs' success. The promotional approach to commercial programs will vary significantly from that of residential programs, primarily due to the differences in the size and nature of the target markets.

A. Residential Programs

PNM has gained valuable experience about the relative effectiveness of various promotional tactics from the existing gas programs and the successful implementation of PNM Sky Blue. We know, for example, that the monthly bill insert and direct mailings are among the most effective communication vehicles, particularly if they are accompanied by simultaneous media advertising. These vehicles will continue to be a major source of information on the programs for our residential customers.

All promotional materials will encourage customers to visit the PNM Energy Efficiency Program website (**www.pnm.com**) or call the toll-free rebate hotline (866-REBATES) for more information. We plan to continue to utilize and enhance the content on our website by adding additional features and general energy efficiency information. These additions are very valuable in educating customers about the programs and their benefits, and should help to lower resistance to unfamiliar technologies. Since customers will be drawn to different benefits of energy efficiency (i.e. one person likes the money savings while another enjoys the feeling of doing something good for the environment), PNM will use its website to highlight a broad spectrum of program benefits in order to appeal to different customers' needs and interests, which is intended to drive participation. We also plan to send a number of direct mail offerings, which have been successful in increasing participation in the existing gas programs.

The residential market is very large, so a variety of approaches must be used to assure sufficient reach. PNM intends to employ retail point of sale displays, print advertising, radio advertising, television commercials, direct mail, posters in payment offices, and the PNM web site, as well as third party communication channels including retailer, contractor, community and professional organizations. The use of many communication channels increases the reach of the message and the level of customer awareness, which will be crucial in the success of these programs. PNM will be able to take advantage of the promotional materials created for gas energy efficiency programs by incorporating information about both gas and electric programs, where appropriate, in radio and television commercials, bill inserts, and targeted mailings where appropriate, which will further enhance the public's awareness and participation.

The ENERGY STAR Home program will be promoted like a commercial program, since its success is dependent upon establishing a collaborative relationship with the homebuilder community. Promotional efforts will target the homebuilder associations and their publications, including those specializing in building "green" homes. Opportunities for cooperative advertising with builders and homebuilder organizations will also be explored. This program will also include a significant effort to provide technical assistance in the form of training and informational seminars in partnership with local

and national organizations such as ENERGY STAR (EPA), the U.S. Department of Energy, and the local green-build organizations.

The Energy Savers Kit Direct Install program will be administered by MFA. Although MFA, through their network of sub-contractors, will be responsible for qualifying participants and advertising the program, PNM will also engage in promotional efforts that target potential participants. PNM's call center representatives will refer customers to MFA as appropriate. Brochures on the program will be made available at the walk-in centers.

PNM will work cooperatively with builders and retailers in the promotional effort for both residential and commercial programs. Participating contractors and retailers will receive rebate materials and training materials regarding PNM's energy savings programs and we will periodically send follow-up mailings.

Finally, although the new programs in this plan are described separately for purposes of analysis, many of them will be presented together in promotional messages to the public. For instance, the Residential Indirect Cooling program will be combined with the ENERGY STAR Home program when promoting the program, which will help customers to learn about the programs available to them, and PNM to more economically promote these programs.

B. Commercial Programs

Marketing and promotional efforts aimed at commercial customers will not utilize mass-market channels. Instead, efforts will be focused on targeted market channels such as direct mail, and PNM-hosted "contractor events." Other utilities have reported that educational events for the contractors are excellent venues to educate and solicit participation from contractors . Program information will also be through business associations such as the Building Owners and Managers Association (BOMA), local chambers of commerce and facility managers' groups as well as trade associations, contractor groups and retailer organizations. PNM will also utilize its staff of commercial account managers to promote the program during regular account maintenance visits.

V. Staffing and Schedule

PNM Energy Efficiency Program staff, currently four employees will be responsible for all development and promotional efforts, recruitment of trade allies, monitoring of rebate submissions, and annual PRC reporting and will administer the programs. This group will also be responsible for designing future energy efficiency programs. Outsourcing the rebate processing function has been a cost-effective solution for gas programs; therefore, PNM intends to out-source this function for the electric programs.

Following is a proposed work plan and timeline for implementation of the new programs, subject to approval of the programs by the PRC.

Activity/Event	Targeted Date
Program Filing	January 31, 2007
Contract negotiations with RFP respondents	May 1, 2007
Promotional Plan and Material Design	July 1, 2007
Convene PRC appointed M&V committee	July 1, 2007
Program Approval	August 1, 2007
Issue M&V RFP	September 1, 2007
Program materials delivered to trade allies	September 15, 2007
Implement programs	October 1, 2007

VI. M&V and Compliance Reporting

A. Measurement and Verification

In compliance with the Act and the Rule, an independent program evaluator will be hired to perform M&V for these programs. The independent evaluator will prepare a report which includes documentation, at both the total portfolio and individual program levels, of expenditures, measured and verified savings, and cost-effectiveness of all utility programs including self-direct programs. The report will include deemed savings assumptions and all other assumptions used by the evaluator. Objectives of the M&V process include confirming that measures were actually installed, that the installation meets reasonable quality standards, and that the measures are operating correctly and are expected to generate the predicted savings.

1. M&V of program savings has the following components:

Check proper installation and correct operation of energy efficiency measures:
The evaluator, utilizing an appropriate sampling methodology, will select random samples of program participants for on-site visits and/or telephone surveys. While the primary purpose of the visits and surveys is to verify installation and correct operation of the measures, the evaluator can also use the contacts to gather customer feedback on the programs.

Verify savings:
The Rule defines deemed savings as the "…expected energy and demand savings attributed to well-known or commercially available energy efficiency and load management devices or measures based on standard engineering calculations, rating, simulation models or field measurement studies…" The application of deemed savings values is justified in situations where the same measure will yield similar savings when installed in a wide variety of different settings, and in situations where more extensive measurement and verification activities would prove cost prohibitive. Moreover, when non-weather-dependent energy efficiency methods are employed such as for the Residential Lighting program, Refrigerator Recycling program and Commercial Lighting programs, the use of deemed savings is further justified. The effectiveness of these measures will also be evaluated using secondary research, engineering review, and analysis.

The Residential ENERGYSTAR Homes, and Residential Indirect Cooling programs will require a more complex M&V approach since the effectiveness of these measures can vary across installations. The program evaluator will be required to specify which methods are most appropriate and how they will be applied to each program.

A more detailed description of the M&V procedure for the individual programs is at the end of each program description.

Calculate gross and net savings:

The evaluator will calculate gross savings and savings net of free-riders for each of the programs using verified savings, deemed savings and results of participant surveys and on-site visits.

Perform cost-effectiveness testing:
PNM will track and make available to the program evaluator all program expenditures. To the extent possible and where applicable, program management expenses will be assigned to specific programs. Where this is not possible, these costs will be allocated to the programs using an appropriate allocation methodology provided by PNM. PNM will also provide appropriate avoided cost estimates to the evaluator. Using the above information, the evaluator will, for each program year, calculate the cost-effectiveness of each program and of the portfolio of programs using the TRC test.

Note on M&V of Upstream Programs:
Under the proposed Residential Lighting program, manufacturers, distributors or retailers would discount the price of CFLs at the time of purchase. While this approach is recognized to be the most trouble-free from a customer's point of view, it makes the M&V process more complicated because every customer purchasing a CFL receives the discount. M&V requires a different sampling methodology in this case since usage records for each participant are not available. A typical sampling method involves retail intercept interviews in which observers approach participants at various locations at the time of purchase. Once the participant agrees to the interview the remaining M&V process is the same including scheduling a number of on-site inspections. The interviews and follow-up would be useful also in identify the extent of non-PNM customer participation in the program. This information would be added to the free-rider estimate and the savings deducted from the program analysis. This method is used by Arizona utilities for example[3].

B. Reporting

PNM will make annual compliance filings every April 1 that will cover program evaluation and tariff reconciliation. The filing will include the M&V report of the independent evaluator. PNM will also identify any programs for which modifications will be proposed within 90 days as required by the Rule. PNM will request any needed reconciliation of the tariff rider to reflect on actual response rates and actual expenditures made in implementation of the programs. The tariff rider will be adjusted for the subsequent year. PNM proposes to make the compliance filing as necessary on April 1, 2009. This would cover the period from program launch, estimated to be during the 3rd or 4th quarter of 2007, through December 31, 2008.

[3] Personal communication, Tom Hines, Arizona Public Service.

VII. New Program Details

The following sections provide detailed information on the new programs being proposed. Each program section includes the following topics:

- Description/Objectives
- Implementation
- Conditions
- Incentive Structure
- Documentation & Inspections
- Contractor & Retailer Responsibilities
- Target Market
- Marketing & Outreach
- Relation to Existing Programs
- Participant Costs
- Energy Savings
- Measurement & Verification

Unless otherwise noted, the participant costs and energy savings are all derived from the Potential Study. Please see Section IX for more details.

A. Residential Lighting

1. Description & Objectives

This program is intended to encourage customers to replace incandescent light bulbs with ENERGY STAR CFLs, and to purchase ENERGY STAR efficient light fixtures by offering a combination of up-stream incentives and markdown incentives administered through a third-party contractor. Upstream incentives are discounts at the distributor or manufacturer level. Markdown incentives are applied by the retailer at the point of sale. This rebate method simplifies participation for the customer, as it does not require the submission of traditional rebate forms.

The Residential Lighting program provides the opportunity for very broad participation among PNM customers. Incandescent bulbs can be found in virtually every home. CFLs are a relatively low cost measure, and easily installed. CFLs are also increasingly available at retailers.

A CFL uses approximately 75% less energy than an incandescent bulb, yet provides the same light output. The latest PNM residential survey results indicate that there are on average 1.4 CFLs per home. According to Mike Rufo of Itron, the average residence has more than 20 incandescent bulbs. If 10 60 watt incandescent bulbs were replaced with CFLs in a typical home, and the CFLs were operating for 2.5 hours per day on average, it would save approximately 400 kWh per home, per year.

The Potential Study identified residential lighting retrofit program (replacing incandescent bulbs with CFLs) as the program with the greatest potential for energy savings among residential customers. The Potential Study estimates a cumulative 55

GWh[4] of annual energy savings by 2016 for existing homes, and another 22 GWh in new construction[5]. PNM is positioned to assume a leading role in the transformation of the New Mexico residential lighting market, especially when partnering with retailers, manufacturers, and the ENERGYSTAR program.

2. Implementation

As mentioned earlier, PNM is structuring this program as an upstream program. Upstream delivery offers many advantages for this program. Because it is a relatively low cost measure, many customers may not view the savings as sufficient compensation for the trouble of completing and submitting rebate forms. Experience at other utilities has demonstrated that upstream lighting programs are an excellent means of achieving high levels of customer participation[6]. Point of sale ("POS") rebates are the most effective way to motivate buyer behavior, especially for the individual purchases of light bulbs. A manufacturer buy-down, where utility incentives are applied at the wholesale level, is an easy way to launch the program, and would allow PNM to promote only the best products.

The Residential Lighting program will be delivered through a third party. PNM will select the third party through an RFP process. PNM chose to engage a third party to deliver this program because it will be a high volume program and to take advantage of existing firms that have implemented many of these programs for other utilities. These firms experience allows them to better estimate participation, more effectively market the program, and take advantages of relationships already developed with manufacturers and distributors. While the third party will be responsible for marketing design and execution, PNM will have approval authority over all communications materials.

The rebate amount will vary depending on the wattage of the light bulb or light fixture. Forming strategic partnerships with DOE's ENERGYSTAR program will allow PNM to take part in promotions such as their annual *Change a Light, Change the World* campaign, and will also be an effective way to leverage marketing efforts. Promotional mailings will encourage customers to install energy efficient lighting, which will be accomplished by advertising through bill inserts and targeted mail campaigns. Through the third-party contractor, PNM would also work with retailers in their advertising, such as point-of-purchase ("POP") displays and mention of the lighting program discount in their weekly advertising circulars.

3. Conditions

Only ENERGY STAR qualified CFLs and CFL fixtures qualify for the incentives.

4. Incentive Structure

For CFL and other high efficiency lighting applications, all coupons and in-store rebates will be based on a dollar per watt basis. Based on the information in the responses to PNM's RFP for third-party implementation of the Residential Lighting program, the

[4] Potential Study - Exhibit 4-12 "Achievable Energy Savings Potential in Existing Residential Homes by End Use…"
[5] Potential Study - Exhibit 4-14 "Achievable Energy Savings Potential in New Construction by End Use…"
[6] "Compact Fluorescent Lighting in America: Lessons Learned on the Way to Market", prepared for DOE by Ecos Consulting, May 2006.

average incentive level will be about $1.70 per bulb. The rebate amount may be adjusted in the future because the pricing and technology changes fairly rapidly.

5. Documentation & Inspections

Documentation will be dependent on the implementation method. An in-store rebate implementation will require sales records from each participating retailer, distributor or manufacturer. Arizona Public Service ("APS") is an example of a utility that has implemented an upstream buy-down program. The lighting program administrator for APS will have a person in the lighting section of a participating retailer to gather specific customer information at the point of sale. The in-store person has a post card and asks the customer three questions: their name, phone number, and their light purchase.

6. Contractor & Retailer Responsibilities

The third-party contractor will be responsible for many aspects of the program, including implementation plan development and execution, marketing and communication plan development and execution, manufacturer and retail recruitment, field implementation, payment processing and program tracking and reporting.

To aid in the documentation of free rider estimations, we will request that the contractor obtain and provide to PNM estimates of CFL sales prior to implementation of any programs.

7. Target Market

The target market is all PNM electric residential customers. The up-stream incentives will be available to anyone that purchases the products at participating retail outlets located within PNM's service territory.

8. Marketing & Outreach

Because PNM is outsourcing the delivery of the residential lighting program to a third-party contractor, the contractor will be responsible for development and execution of the marketing plan, subject to PNM's approval. In terms of presentation to customers, this program will be positioned entirely as a PNM program. Additionally, PNM will include information about this program in any informational materials describing PNM efficiency offerings.

Other utilities, such as Arizona Public Service (APS), have experienced major success in their lighting programs by partnering with ENERGY STAR and participating in its campaigns, such as the annual "Change a Light, Change the World" campaign. PNM also plans to promote the program by highlighting program benefits and information on its website, as well as list and describe the program in bill inserts, radio and television advertisements, and direct mail.

9. Relation to Existing Programs

There are no existing residential lighting programs.

10. Participant Costs

The Potential Study assumed an average cost per bulb of $5, which may seem high considering the combination packs found at some major retailers. However, when specialty bulbs, such as candelabra base, or higher watt reflector bulbs for recessed fixtures are considered, this is a reasonable estimate.

11. Energy Savings

The estimated average annual savings are 479 kWh per household or about 48 kWh per 60-watt incandescent equivalent bulb. Estimated peak demand savings are 0.0024 kW per bulb.

12. Measurement & Verification

M&V Objective

The M&V objectives for the PNM "CFL" buy-down Program include the following:

- Verify the CFL wattage and CFL life of the discounted bulbs according to Vendor/Brand specifications.
- Verify the wattage of incandescent bulbs that are replaced with CFLs.
- Quantify, according to industry standard M&V protocols, the annual energy savings and lifetime energy savings resulting from the replacement of incandescent bulbs with the more efficient CFLs.
- Report the distribution of CFL bulbs by brand, model, and wattage.
- Interviews & site visits to verify actual installations.
- Estimate free riders and the number of non-PNM residential participants.
- Calculate the TRC based on actual savings and adjust for free rider participation including non-PNM customers.

M&V Sampling

For the upstream portion of the program, the independent evaluator will utilize in-store monitors, random phone surveys and other methods to acquire a statistical sample of participants for conducting M&V analysis. Similar methods have been employed successfully at other utilities such as APS and Nevada Power Company[7].

M&V Data and Assumptions

Detailed information on the CFLs purchased at participating retailers will include:

- Retailer Name
- Utility Buy-Down Amount (dollar amount per bulb)
- CFL Quantity Sold
- CFL Type, Brand & Model
- CFL Wattage
- CFL Light Output (Lumens)
- CFL Life (Hours)
- Wattage of Typical Incandescent Bulb Replaced by CFL

The CFL brand and model number will be used to verify the type, wattage, light output and life, according to specifications provided on the ENERGY STAR website.

B. Residential Refrigerator Recycling

1. Description & Objectives

The Refrigerator-Recycling program is designed to encourage early retirement of old refrigerators or unnecessary second refrigerators. The program will pay an incentive to customers retiring a refrigerator that is still operating. The third party administrator will pick up the old refrigerator and recycle it.

[7] Nevada Power Company ENERGY STAR Lighting and Appliance Project, June 2006

Like the Residential Lighting program, this program also offers the opportunity for broad participation. It is a no-cost service to customers. Based on the appliance saturation study conducted in 2006, 30% of PNM's electric customers own multiple refrigerators.

According to the Potential Study, energy savings from retirement of older, less efficient residential refrigerators and freezers can be significant. The efficiency standard for refrigerators was increased in 1993 and again in 2001, and any refrigerator manufactured earlier will use much more energy than today's new, efficient models[8]. The Refrigerator Recycling program seeks to accelerate the realization of such energy savings by encouraging consumers to dispose of older, less efficient refrigerators. This is accomplished by providing both a monetary incentive and a convenient means of properly and permanently retiring older units.

2. Implementation

A third party contractor will be utilized for the majority of the implementation and execution of the Refrigerator Recycling program. The selected contractor will be responsible for marketing the program, qualifying product eligibility over the phone, arranging appointments for refrigerator and freezer pick-up, transporting units to a recycling facility, and arranging for the demanufacture and recycling of units. An advantage of a third-party contractor being responsible for the recycling aspect of the program, as opposed to allowing participants to choose their own recycling contractor, is that this prevents used refrigerators from entering the secondary market and being reused. The selected contractor will be responsible for keeping records of all refrigerators collected and recycled as part of this program and provide this data to PNM in electronic form, which will allow tracking of energy savings. The contractor will also be responsible for processing rebate forms and issuing incentives to program participants.

PNM chose to engage a third party to deliver this program because of the required infrastructure required for this program. Delivery of this program requires coordination with customers to pick up the old appliance, arrangements with recycling facilities and sub-contractors to pick up and store the refrigerators.

3. Conditions

To qualify for the recycling rebate, the refrigerator or freezer must be plugged in and in working condition, and must be between 10 and 27 cubic feet in size; mini refrigerators are not accepted. The refrigerator must be located at the address of a current residential PNM electric customer. There is a limit of two rebates per household.

4. Incentive Structure

Participants will receive a $35 incentive to recycle their inefficient working refrigerator or freezer. The typical incentive for refrigerator recycling offered by utility energy efficiency programs is $35 to $40, and other utilities have been very satisfied with levels of participation.[9] This suggests that $35 will be an appropriate, effective incentive to encourage PNM's customers to recycle their inefficient refrigerators and freezers.

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[8] Neil Kolwey, "Refrigerator Recycling Programs: Rounding Up the Old Dogs for Easy Energy Savings," *E Source Market Scan Report,* (April 2006): page 6

[9] Neil Kolwey, "Refrigerator Recycling Programs: Rounding Up the Old Dogs for Easy Energy Savings," *E Source Market Scan Report,* (April 2006): page 4

5. Documentation & Inspections

When customers call to schedule a pick-up, PNM's third party contractor will determine participant eligibility over the phone. The contractor will also record the model number of all recycled refrigerators, which will be used to determine energy savings. This data will be provided to PNM in electronic format.

6. Contractor & Retailer Responsibilities

The implementation of this program will be subcontracted to a third party. The selected contractor will be responsible for qualifying possible participants over the phone, arranging refrigerator and freezer pickups, transporting units to the recycling facility, and arranging demanufacturing and recycling of units. The contractor will also be responsible for keeping records of all refrigerators collected and recycled as part of this program and provide this data to PNM in electronic form, as well as for processing rebate forms and issuing incentives to program participants.

7. Target Market

This program will target residential customers who currently own an old, inefficient refrigerator or freezer that they want to dispose of. This unit could either be a primary unit that will be replaced with a new, more efficient model, or a secondary unit that will be disposed of and not replaced. This target market consists of approximately 120,000 customers.

8. Marketing & Outreach

Because PNM is outsourcing the delivery of the Refrigerator Recycling program to a third-party contractor, and the contractor will be responsible for development and execution of the marketing plan, subject to PNM's approval. In terms of presentation to customers, this program will be positioned entirely as a PNM program. Additionally, PNM will include information about this program in any informational materials describing the set of PNM efficiency offerings.

9. Relation to Existing Programs

PNM does not currently offer any electric energy efficiency programs to its customers.

10. Participant Costs

There are no incremental costs for the participant associated with this program. The program will only offer incentives for recycling old refrigerators and freezers, and not offer an additional incentive for replacing the refrigerator.

11. Energy Savings

Annual energy savings are estimated to be 663 kWh per unit and .0873 kW per household. The Potential Study assumed replacement of the older refrigerator by a new standard efficiency model. Savings could be higher if second refrigerators are not replaced or ENERGY STAR models are purchased.

In addition to saving energy, used refrigerators that are collected as part of this program will be guaranteed to be properly "demanufactured" and recycled. Proper disposal will reduce landfill volume and prevent pollution from refrigerator components that cannot be recycled, and must therefore be destroyed.

12. Measurement & Verification

Energy savings will be based on the estimate of the energy consumption of the refrigerators by collecting the model numbers and referring to the Association of Home Appliance Manufacturers (AHAM) database that provides energy usage values by model number. The M&V contractor will account for increased energy consumption with age by applying a degradation factor. Field measurements of older refrigerators and freezers showed that energy usage increases by about 30 percent for refrigerators that are 20 years old[10]. The M&V contractor will also be required to estimate the free riders. Since this program is new it is not anticipated to have a high percentage of free riders; however, the M&V contractor will be required to perform a survey of a statistically significant sample of participants to determine if they would have disposed of their refrigerator even without the program.

C. Residential Indirect Cooling

1. Description/Objectives

This program is intended to offer a less energy-intensive alternative to refrigerated air conditioning to homeowners by promoting the use of high performance evaporative cooling technology, also known as advanced evaporative cooling. This program is intended to educate residential customers, contractors, homebuilders, and suppliers of A/C equipment about the many advances in evaporative technology. Many perceptions about evaporative coolers produce images of the old aspen pad "swamp cooler," which is a technology that has been commercially available since the 1930's. This technology has an effectiveness of about 55-70%, is inexpensive, and functions reasonably well; however, advanced evaporative coolers use a rigid evaporative medium either 8 or 12 inches thick, and offer effectiveness ratings from about 80 to 90%[11].

This program is designed to rebate an indirect cooling module that mounts in front of single-inlet evaporative cooling equipment as well as any indirect evaporative technology. We will also rebate a portion of the additional expense if a customer chooses to install a cooler with 12" media instead of 8" media since this increases the performance of the unit. Calculations performed with manufacturer software KoolKalc® indicates that 12" media uses less energy to provide the same level of comfort. The installed cost of an evaporative system with the additional module is less than a refrigerated unit; however the performance (as measured by a "comfort factor") is very competitive with the performance of refrigerative cooling system.

Free riders are a concern with any program where rebates will be offered, and they refer to customers who would have purchased the technology anyway; however, based on estimates of sales in the Albuquerque region – as well as areas like Fresno, Phoenix and Denver - customers aren't buying many of these units. In fact, one local distributor estimates that only about two-dozen have been sold in Albuquerque the last ten years, and those have been primarily to commercial customers.

[10] Larry Kinney, "Refrigerator Replacement Programs: Putting a Chill on Energy Waste," E SOURCE Report, ER-00-18 (November 2000), p.11.
[11] New Buildings Institute *Assessment of Market-Ready Evaporative Technologies for HVAC Applications* V.2 November 5, 2006

2. Implementation

This program will target homebuilders, HVAC contractors and local distributors as well as consumers to create awareness. The indirect module is not directly available at the retail level. Therefore, PNM will recruit participating contractors which customers may contact to acquire and install the module.

Education of the consumer and contractors are essential for success. Several contractor events will be required to get the message out to all of the involved parties. We will need to be persistent with our message, and it has been noted that greater contractor involvement is realized when the product distributor is used to encourage participation by the contractors. The distributors are the first line of sales when talking to contractors; therefore, the more informed the counter sales staff is the more successful the product will be.

3. Conditions

The unit must be installed at a PNM residential electric customer location, and a thermostat must control the unit whether it is new or retrofit. If there is not an existing thermostat, one must be installed. A contractor must install the units, and the contractor must verify the installation of the required equipment.

4. Incentive Structure

The incremental cost of this indirect module is approximately $950. To transform this market a rebate is recommended therefore, we are proposing the following:
New Equipment Rebates:

- A $300 rebate for the installation of the indirect module
    - A $100 dollar additional rebate will be paid if 12-inch media is used for the direct portion of the cooler
- A $300 rebate would also apply to a stand alone 100% indirect cooler if selected for a residential application.

Retrofit Applications:

- A $300 rebate for the installation of the indirect module when installed in place of a new refrigerated air conditioning unit.

The rebate will be paid to the homeowner; however, for new construction, if there is no homeowner listed, the homebuilder will receive the rebate. For new construction the homebuilder is responsible for filling out the rebate form and mailing to a third party administrator who will administer the rebates and ensure that all documentation and inspections are complete. In a retrofit application, contractors will stock the forms and must fill out the contractor portion of the rebate form. The contractor will then give the form with receipts to the homeowner and the homeowner will fill out the rest of the form and mail it to the third party administrator. Contractors and homebuilders will be briefed on the rebate process during the marketing and outreach process.

The equipment must be installed prior to receiving the rebate.

5. Documentation & Inspections

The homeowner or homebuilder must agree to inspections of the installed unit for M&V purposes. Contractors must document the work, including labor costs, and equipment costs charged to the consumer.

6. Contractor & Retailer Responsibilities

Rebate forms must be properly filled out, in order to receive the rebate.

7. Target Market

New homebuilders will be the primary target of the indirect module part of the program, particularly those that install primarily refrigerated air conditioning in their new homes. Although the overall penetration of refrigerated air conditioning in PNM's service territory is about 20%, PNM estimates that approximately 55% of new homes are being built with refrigerated air conditioning. Refrigerated air conditioning presents a challenge to the electrical system because of its poor load factor.

Even though new homes are the primary target market, existing homeowners will also be eligible to participate if they install the module in place of refrigerated air conditioning.

8. Marketing & Outreach

Air conditioning is sold on "comfort." Certain customers, who like the cold air provided by the air conditioners in their car and in certain retail and office locations, will decide that they want the same level of comfort in their homes. It is important to educate customers who are concerned with the energy costs. Educational materials and resources would compare costs of refrigerated air conditioning units to advanced evaporative cooling. Moreover, it will be very important to address the issue of comfort as it relates to certain advertising concepts and buzzwords that certain advertisers use to promote refrigerated products. The issues around true humidity levels in the Albuquerque area and affected levels of indoor comfort are difficult to understand on a subjective level so education will be very important.

The sales staff at wholesalers and distributors are also a vital part of the education process since they interact with contractors daily as they come in for supplies. Contractor educational events have been successful in some areas of Nevada and California. Consequently, PNM will employ similar methods to solicit contractor support.

New homebuilders will be targeted specifically through direct outreach efforts. We will visit homebuilders personally and present the options available to them and provide them with material they can give prospective homebuyers. A Santa Fe ENERGY STAR homebuilder stated that many customers who are buying new homes come from out-of-state and they don't understand the benefits of evaporative cooling, so it usually requires customer education and any collateral material would be welcome.

9. Relation to Existing Programs

There are no existing programs that offer incentives for evaporative cooling technologies in PNM's territory.

10. Participant Costs

Estimates from local contractors estimate that a participant would pay between $950 and $1,300 to have an indirect module installed on their existing evaporative cooler and approximately $130 to install an advanced cooling thermostat that offers a pad "pre-wetting" feature.

11. Energy Savings

Annual energy savings are estimated to be 1,292 kWh per unit and 1.056 kW per household based on the estimates in the Potential Study.

PG&E's Technical and Ecological Services Performance Testing and Analysis unit performed specific performance of evaporative coolers[12]. Their tests demonstrated that the cooling effectiveness of a traditional-style unit averages 49%. A single stage 8" rigid media cooler averaged a cooling effectiveness of 78%, and a two stage 8" rigid media cooler with an indirect module attached delivered an overall system effectiveness of 95%.[13]

Comparison calculations performed using KoolKalk software provided by Adobe Air indicate that savings of a 2 stage evaporative cooling system as compared to a 13 SEER cooling system are approximately 1,600 kWh/yr The power consumption numbers are similar to the estimates provided in the Potential Study[14].

12. Measurement & Verification

The Potential Study identifies several challenges to implementing a program to replace refrigerative AC with evaporative AC because evaporative cooling is already much less expensive, and there would be a large percentage of free riders. However, this program is targeted at high performance single inlet style evaporative coolers using advanced evaporative media (such as MasterCool® and UltraCool®).

For an application that is a new installation such as a new home or replacement of existing refrigerated AC, a deemed savings method will be used to estimate initial energy savings. The energy savings of the previous section will be used. For applications retrofitting an existing single-inlet evaporative cooler, the M&V contractor will verify installations and confirm that the unit was installed in place of refrigerated AC.

D. Energy Saver Kit Direct Install

1. Description/Objectives

The goal of the Energy Saver Kit program is to assist income-qualified customers with their efforts to reduce their energy bills.

Individual items from the Energy Saver "Kits" will be installed as needed and appropriate in each qualifying home. The kit consists of the following items:

> 12 CFL bulbs; caulk; outlet and switch gaskets; window and door weather-stripping; door sweeps; shrink fit widow insulation kits; 1.5 GPM energy and water efficient showerhead; 2.2 GPM energy and water efficient kitchen aerator; 1.5 GPM energy and water efficient bathroom aerator; water heater tank wrap; and energy efficiency client education literature.

[12] PG&E Technical and Ecological Services Performance Testing and Analysis Unit, February 2004 Report No.: 491-04.7
[13] The quoted effectiveness ratings are all at low fan speeds – high fan speed effectiveness is reduced by 5 to 6%.
[14] Potential Study p 4-24 section discussing Evaporative Cooling

2. Implementation

PNM has initiated a draft contract with MFA and PNM will rely on MFA to administer the program via their sub-grantees. Payments will be made to MFA, per invoices up to the maximum funding amount.

The MFA is a quasi-public entity financing housing and related services for low to moderate income and underserved families throughout the state. MFA provides a variety of affordable housing programs that include assistance to homeless individuals and families, developing new housing projects and providing opportunities for homeownership. Created by the state of New Mexico, the MFA is a fully self-supporting, not-for profit enterprise and does not receive any state funds for its operations. Since its inception in 1975, the MFA has provided more than $3.2 billion in affordable housing for families in New Mexico.

Presently, the MFA manages the Weatherization Assistance Program (WAP), which provides limited assistance to low income homeowners to improve the energy efficiency of their homes thus reducing their utility costs. To be eligible homeowners must have incomes relative to family size at or below 150% of federal poverty guidelines, but due to the scarcity of resources, priority is given to the lowest income households.

MFA currently uses four sub-grantees to manage the installation of the WAP measures. The sub-grantees are Community Action Agencies or nonprofit organizations that were obtained through a competitive request for proposals process based on their experience and capacity to perform the required repairs. They have regionalized the sub-grantees areas of responsibility by county throughout the State of New Mexico. (Please see Section XI for a complete listing.)

3. Conditions

The beneficiary must be a residential PNM electric customer. MFA currently qualifies WAP participants based on the 150% of poverty rule. In order to help customers that are still in need and may not get help through the WAP program the Energy Saver Kit Direct Install program will have a criterion of 200% of the federal poverty level. The following guidelines are published by the Department of Health and Human Services on an annual basis.

2006 Poverty Guidelines Effective January 24, 2006		
Persons in Family Unit	**Poverty Guideline**	**200% of Poverty**
1	$ 9,800	$ 19,600
2	$ 13,200	$ 26,400
3	$ 16,600	$ 33,200
4	$ 20,000	$ 40,000
5	$ 23,400	$ 46,800
6	$ 26,800	$ 53,600
7	$ 30,200	$ 60,400
8	$ 33,600	$ 67,200

For family units with more than 8 persons, add $3,400 for each additional person.

4. Incentive Structure

The total budget per home is $300 with no cost to the customer. This includes the cost of the kits, installation, training and administrative costs.

5. Documentation/Inspections

The MFA will provide program oversight and make random inspections of the installed projects. The MFA will provide data to PNM for all of the installations as well as results from the random inspections.

6. Contractor & Retailer Responsibilities

The MFA will ensure that the sub-grantee installers are properly trained to install the weatherization kits.

7. Target Market

The target market will be households at or below the 200% of federal poverty level of income. Although PNM does not have a firm estimate of the number of PNM customers at or below the 200% of poverty level, PNM did estimate that about 20% of its customers are at or below 150% of the poverty level.

8. Marketing and Outreach

MFA does significant outreach for the Weatherization Assistance Program (please see Section X for a summary). In addition, PNM will produce brochures to be distributed by PNM and MFA through their sub-contractors. The brochures will be distributed at outlets most likely to reach the target market such as senior centers, food banks, Meals-On-Wheels and pueblos. PNM will also promote the program as appropriate through our call center.

9. Relation to Existing Programs

The existing PNM funded Weatherization Assistance Program (WAP) targets customers at or below the 150% of poverty level, which provides more extensive renovations.

10. Participant Costs

The total installed cost is approximately $300, with no cost being borne by the recipient. The per-home cost of the materials in the “kit” is about $100. The cost of the installation labor, including training and training materials is estimated to be $170. The administration cost (at about 10% of the total installed cost of the “kit”) is estimated to be $30.

11. Energy Savings

Annual electric savings are the same savings per bulb as for the residential lighting program and are estimated to be 575 kWh per household. Total therm savings will be approximately 54 therms based upon the following individual component savings: weatherization kit – 33 therms; water heater tank wrap – 26 therms (installed in half the homes), and low-flow showerhead and faucet aerators – 15 therms (installed in half the homes).

12. Measurement and Verification

MFA adheres to strict monitoring and reporting guidelines established by DOE, their primary source of funding. A survey is completed for each home that receives assistance and records of all improvements including estimated energy savings are

required. Random inspections are conducted to insure quality workmanship. All records and reports will be made available to the independent evaluator for review. In addition, the independent evaluator will conduct their random inspections of participating homes in order to make an additional assessment of the installed measures.

E. ENERGY STAR Home

1. Description/Objectives

Homes that earn the ENERGY STAR Home rating must meet guidelines for energy efficiency set by the U.S. Environmental Protection Agency. ENERGY STAR qualified homes are at least 15% more energy efficient than homes built to the 2006 International Energy Conservation Code (IECC).

ENERGY STAR qualified homes can include a variety of energy-efficient features, such as effective insulation, high performance windows, tight construction and ducts, efficient heating and cooling equipment and ENERGY STAR qualified lighting and appliances. These features contribute to improved home quality and homeowner comfort, and to lower energy demand and reduced air pollution. ENERGY STAR also encourages the use of energy-efficient lighting and appliances, as well as features designed to improve indoor air quality.

Home energy ratings provide a standard measurement of a home's energy efficiency. Ratings are used for both new and existing homes. For new homes a rating often verifies energy performance for the ENERGY STAR homes program, energy efficient mortgages, and energy code compliance. An energy rating allows a homebuyer to easily compare the energy performance of the homes being considered.

There are two types of ratings:

- Projected ratings – Ratings performed prior to the construction of a home or prior to the installation of energy improvements to an existing home.
- Confirmed ratings – Ratings completed using data gathered from an on-site inspection, which could include performance testing of the home.

PNM's rebate will require that confirmed ratings be used. Confirmed ratings involve an on-site inspection of a home by a residential energy efficiency professional, a home energy rater. Home energy raters are trained and certified by a RESNET accredited home energy rater training provider.

The home energy rater reviews the home to identify its energy characteristics, such as insulation levels, window efficiency, wall-to-window ratios, the heating and cooling system efficiency, the solar orientation of the home, and the water heating system. Performance testing, such as a blower door test for air leakage and duct leakage, is usually part of the rating.

The data gathered by the home energy rater is entered into a RESNET accredited computer program and translated into a rating score. The home receives a score between 1 and 100, depending on its relative efficiency. An estimate of the home's energy costs is also provided in the report. In New Mexico a home must have a HERS rating of 85 or less to qualify as an ENERGY STAR home.

Unlike an energy audit or a weatherization assessment, a home energy rating is a recognized tool in the mortgage industry. Home energy ratings can be used in a variety of ways in the housing industry. The rating score provides an easily understandable means to compare more efficient homes by their relative energy efficiency, since a rating quantifies the energy performance of a home.

2. Implementation

Implementation will be accomplished primarily through participation and education efforts with the New Mexico Home Builders Association, and through a rebate program to help create incentives for the homebuilders.

3. Conditions

To qualify for an incentive, the home must have residential PNM electric service. Modular and/or mobile homes will only be eligible if the home is ultimately located and installed with PNM utility service.

4. Incentive Structure

Builders will receive a rebate equal to $500 upon receipt of the ENERGY STAR certificate. These incentives are intended to offset between 25% and 50% of the ENERGY STAR certification and inspection costs.

The rebate will be paid to the homebuilder. The homebuilder is responsible for filling out the rebate form and mailing it to a third party administrator who will administer the rebates and ensure that all documentation and inspections are complete. Homebuilders will be briefed on the rebate process during the marketing and outreach process.

5. Documentation & Inspections

With the help of independent Home Energy Raters (HERS), ENERGY STAR builder partners choose the most appropriate energy-saving features for their homes. Additionally, raters conduct onsite testing and inspections to verify that the homes qualify as ENERGY STAR. The HERS rater cannot issue the certification, the HERS provider does this, but each qualifying home does get a certificate which is issued through the rater.

The HERS provider is also responsible for quality audits on the rater and every rating is reviewed by the provider in addition to field audits.

6. Contractor & Retailer Responsibility

Homebuilders must register with PNM as an ENERGY STAR participating builder in advance of submitting their ENERGY STAR certificates for rebates. The Homebuilder is also responsible for the coordination of the HERS inspections and other paperwork relating to ENERGY STAR.

7. Target Market

New home construction contractors and homebuilders are the primary target including the 23 builders or developers of traditionally built and/or systems-built (modular, SIPs, ICFs) homes that have partnered with ENERGY STAR. According to the ENERGY STAR web site, 8 of these builders have built about 182 ENERGY STAR qualified new homes in PNM's service territory in the last 12 months; however, the ENERGY STAR standards

were raised in July of 2006 and we would expect fewer homes to be built in the coming year due to the added costs, in the absence of PNM's program.

8. Marketing & Outreach

Although this program is classified as a residential program, the manner in which it will be marketed will more closely resemble a commercial program. The marketing and outreach strategy will focus on educating contractors and homebuilders; therefore, much of the marketing will be done with a smaller-market approach as opposed to the mass-market strategy employed for many of the residential programs. PNM plans to build partnerships with contractors and homebuilders, and attend contractor and homebuilder association meetings where presentations will be made to promote the program.

9. Relation to Existing Programs

There are currently no existing electric energy efficiency incentive programs.

10. Participant Costs

The incremental expense will consist of two parts; the cost of building to the ENERGY STAR standards and, the cost of the certification process. The estimated average incremental cost across the three NM climate zones and various building types is $2238.

11. Energy Savings

The estimated annual energy savings are 126 therms and 1483 kWh per home. Peak demand savings are estimated to be 0.87 kW per home.

12. Measurement & Verification

Homes that earn the ENERGY STAR must meet guidelines for energy efficiency set by the U.S. Environmental Protection Agency. ENERGY STAR qualified homes are at least 15 percent more energy efficient than homes built to the 2006 International Energy Conservation Code (IECC). We will assume that based on this data and the energy savings estimated by the Potential Study, we will deem that each home built to this standard will save 1483 kWh per year.

To further verify the estimated savings the M&V evaluator will perform residential engineering analysis on a statistically significant sample of homes built to the ENERGY STAR standards and compare those results with new homes that do not have the certification.

F. Residential Load Management

1. Description/Objectives

The primary goal of the load management program is to diversify PNM's resource portfolio by the addition of cost effective load control resources. The intent of this program is to offer residential customers an incentive and the opportunity to participate in limiting the system peak demand on the highest peak demand days of the year. This program will be implemented by Comverge, Inc. Comverge will install load control devices primarily on residential air-conditioning units which can be cycled on and off at PNM's request during peak days. Units are not turned off for long periods, rather they are cycled in groups to lower overall demand without sacrificing comfort significantly. Customers typically notice little difference other than a slight increase in temperature during dispatch events which can occur only up to 100 hours per year.

Comverge is a nationally recognized demand side management implementer, managing load control contracts with many North American utilities including western region utilities such as SDGE and Rocky Mountain Power. A DSM program that is easily dispatched offers many benefits including:

- A resource that is independent of volatile fuel markets
- A relatively rapid solution to help manage occasional peak load transmission & generation constraints
- Zero negative environmental effects

2. Implementation

The Residential Load Management program will be delivered through a third-party. The selected contractor will be responsible for marketing the program, installing and maintaining all equipment, and tracking and reporting results. The program will cycle refrigerated air conditioners on and off during peak load periods. PNM system operators will control operation of the equipment. Capacity delivered under this program must respond within 10 minutes of notification.

There are several benefits to a turn-key demand response contract to PNM and its customers. In essence, PNM is purchasing dispatchable capacity of a specific size, and duration which is very similar in structure to a power purchase agreement.

The cost benefit of a turn-key program lies in the fact that the implementation contractor is compensated only for the proven capacity achieved and as such assumes the cost risk for customer acquisition of marketing; equipment purchase, installation and operation; and mitigation of customer attrition over time, through customer attrition, equipment failure or any other reason , PNM pays only for the delivered value of the contract. The payment is based specifically on actual monitored performance of the program. In addition, there are penalties for non-performance, states as liquidated damages. Further, the contract structure minimizes the requirement for PNM internal resources normally required in support of the program. By using experienced contractors, customer processes will be streamlined which should result in greater customer satisfaction.

The load management programs administrator was selected following an RFP process. Cost-effectiveness using the TRC test was a primary consideration along with other important factors including: technical viability, strength and experience of the company and ability to meet the supply-side load criteria. Final capacity targets and costs were defined during contract negotiations with each vendor. Ten-year contracts, contingent on NMPRC approval of PNM's tariff rider for cost recovery, have been negotiated between PNM and Comverge.

The contractor will design, market, install and operate a Direct Load Control (DLC) system and assume all of the performance risk including customer acquisition and technical execution of the program. PNM system operators will dispatch the load control resource using a web-based interface.

3. Conditions

The contractor will own the DLC system and will be paid by PNM for delivered capacity. (please see Section XII for more details of the load management contracts.)

4. Incentive Structure

The participating customers will receive compensation to have this equipment installed at their residence. Annual payments will be $25 per household.

5. Documentation & Inspections

The contractor will monitor activities such as reaction time, load reduction quantity, process and analyze the data monthly, present the reports to PNM and tally these results in an annual report.

6. Contractor & Retailer Responsibilities

The contractor will provide all of the marketing and customer recruitment efforts (subject to PNM oversight and approval), install and maintain the system, and provide measurement and verification of load reduction data. The contractor will provide to an independent program evaluator all the information needed to verify load reductions, including documentation, units methodology, criteria for sample selection, all data, and anything else needed to audit and verify its results.

7. Target Market

Residential homeowners with non-critical high use appliances such as refrigerated air conditioners, swimming pools, and electric water heaters are the targeted market. PNM market research indicates that approximately 20% of our residential customers have refrigerated air conditioning.

8. Marketing & Outreach

The contractor will be responsible for designing and managing the entire residential load control program, including the marketing and outreach portions. Any marketing and outreach activities and associated collateral will be approved by PNM.

9. Relation to Existing Programs

There are no other existing programs designed to directly control residential demand.

10. Participant Costs

There will be no cost to the customer.

11. Energy Savings

The target capacity after fours year is about 32 MW. Energy savings are not a goal of this load management program.

12. Measurement & Verification

A statistical sample of the participating customer sites will have interval meters installed. The actual load reduction at these locations will be used to determine the average load for capacity payment purposes. All performance and installation records will be made available to an independent evaluator for analysis and verification.

G. Commercial Lighting

1. Description/Objectives

The intent of this program is to promote the use of a broad array of energy efficient lighting applications including:

- High efficiency T8 and Super T8 lighting fixtures
- T12 to T8 or T5 fixture retrofits
- T8 to T5 fixture retrofits
- Incandescent to CFL replacements
- Interior high bay linear fluorescent fixtures
- High-Intensity Discharge Fixtures
- Ceramic Metal Halide (CMH) Fixtures
- LED Exit Signs
- Occupancy Sensors

Incentives will be provided to commercial customers that replace existing lighting with energy efficient lighting. To limit the amount of free riders this program is designed as a retrofit program; therefore, to qualify for a lighting rebate, the new fixtures must replace existing fixtures, whether they are incandescent, mercury vapor, magnetic ballast T12 or T8 fluorescent, or other high wattage ballast fixtures.

2. Implementation

Implementation of this program will be primarily through the lighting vendor and contractor community. PNM will inform the participating contractors, electrical contractors, installation contractors, lighting distributors, and wholesalers, of the program details and rebate requirements. PNM's commercial account managers will also contact their segment customers and inform them of the new programs. PNM will make presentations to various trade associations to help promote the program benefits.

3. Conditions

The rebates assume a one-for-one replacement of fixtures (in retrofit situations) that will result in energy savings. Items must be on the list of qualifying equipment (see below). CFL bulbs discounted under the Residential Lighting program are not eligible for rebates under this program.

4. Incentive Structure

PNM intends to offer a prescriptive lighting incentive, where a contractor installed or self-installed fixture will be rebated in the following amounts:

PNM Prescriptive Lighting Incentive Worksheet

Equipment Type	Replace	Incentive
Compact Fluorescent Lamps (CFL)		
All Sizes	Incandescent	$2.00 per lamp

EQUIPMENT		SPECIFICATIONS	REBATE/UNIT
Fluorescent T8 Lamps with Electronic Ballasts			
4 foot	1- and 2-lamp	Retrofit incandescent or T12 systems with T8 or Super T8 systems	$5.00
	3- and 4-lamp		$9.00
8 foot	1-lamp		$5.00
	2-lamp		$10.00
Fluorescent Super T8 Lamps with Electronic Ballasts			
4 foot	1- and 2-lamp	Retrofit incandescent or T12 systems with Super T8 systems	$10.00
	3- and 4-lamp		$18.00

Low-Wattage Fluorescent T8 Lamps			
4 foot; 28 W or less	per lamp	Install 28W or less	$0.50/lamp
Fluorescent T5 Lamps with Electronic Ballasts			
4 foot or less	1- and 2-lamp	Replace incandescent or T12 systems with T5 systems	$5.00
	3- and 4-lamp		$16.00
High-bay Fluorescent Lamps with Electronic Ballasts			
4 foot or less	6- and 8-lamp	Replace 400W HID systems with 6- or 8-lamp T8 or 4-lamp T5 HO systems	$75.00
4 foot or less	4-lamp		
Hardwired or Modular Compact Fluorescent Fixtures			
18W or less		Replace incandescent systems with hardwired or modular CFL systems. Does not include screw-base CFL's	$8.00
19W to 32W			$18.00
33W to 56W			$24.00
Metal Halide and High Pressure Sodium Fixtures			
150W or less		Replace incandescent or mercury vapor with high-pressure sodium or metal halide.	$17.00
151W to 250W			$28.00
251W +			$45.00
Pulse-Start Metal Halide Fixtures			
175 W or less		Replace incandescent, mercury vapor, high-pressure sodium, or metal halide systems with pulse-start metal halide systems.	$25.00
176W to 319W			$40.00
320W to 749W			$55.00
750W+			$65.00
Automatic Controls			
Wall Mount Occupancy Sensor		Must be permanently installed	$12.00
Ceiling Mount Occupancy Sensor			$36.00
Photocell			$12.00
LED			
Replace incandescent LED exit signs. Retrofit elevator lights with LED		Replace incandescent LED exit signs	$6.00/sign or fixture

The rebate will be paid to the customer or business owner. The customer can fill out the prescriptive rebate form if the customer performs all of the work. If a contractor performs the work, the lighting contractor, or lighting wholesaler/distributor is responsible for filling out the rebate form. The customer will mail the forms to the third party rebate processor who will administer the rebates and ensure that all documentation and inspections are complete. Training sessions for lighting contractors, and lighting wholesaler/distributors will be held during the marketing and outreach process.

The equipment must be installed prior to receiving the rebate. All rebate submissions must include required receipts and work documentation.

5. Documentation & Inspections

In the case where a customer uses a contractor for the lighting retrofit, the contractor is responsible for filling out the rebate form and supplying the invoice. In the circumstance where a customer will use internal labor to retrofit fixtures, an internal labor invoice or other documentation of labor will be required along with the lighting equipment invoice to ensure that the fixture was actually installed. Customers must agree to inspections.

6. Contractor & Retailer Responsibilities

The participating contractors must stock rebate forms and receive training about the program. A sample of local lighting contractors have been contacted regarding our

potential program and they are very interested in working with PNM to help promote energy efficient lighting.

7. Target Market

All non-residential PNM customers receiving electric service under Rate Schedules 2A, 2B, 3B, 5B, 15B, 17B, 23B and 30B and PNM TNMP-NM Services Rate Schedules 2, 3, 5 and 12 are eligible for the commercial lighting program. Owners and operators of office buildings, restaurants, retail stores, food stores, schools, colleges, hospitals, hotels, and other miscellaneous buildings, are the applications with the most potential.

8. Marketing & Outreach

Efforts will be focused on specific market channels including direct mail, and PNM hosted "contractor events". Other utilities have recommended that educational events held at the distribution and contractor supply warehouses are excellent venues to educate and solicit participation from the contractor community. This also provides an excellent venue for training contractors how to fill out rebate forms.

Program information will also be promoted through business associations such as the Building Owners and Managers Association (BOMA), International Facility Managers Association (IFMA), local chambers of commerce and facility managers' groups as well as trade associations, contractor groups. PNM will also utilize its staff of commercial account managers to promote the program during regular account maintenance visits.

9. Relation to Existing Programs

There are no existing commercial lighting programs.

10. Participant Costs

The total costs to the participants are highly variable depending on the extent of their lighting project. The Potential Study examined many bulb types and fixture replacements with incremental costs ranging from $5.80 to $350. The average cost per unit across all units and all commercial segments was $15 per unit.

11. Energy Savings

The average annual savings per unit across all fixture and bulb types is 188 kWh and the peak demand reduction is 0.029 kW per unit.

12. Measurement & Verification

<u>M&V Objective</u>

The M&V objectives for the lighting program will include the following:

- Verify the wattage and life of the rebated equipment according to Vendor/Brand specifications.
- Verify the typical wattage of bulbs that are replaced.
- Quantify accordingly to industry standard M&V protocols the annual energy savings and lifetime energy savings resulting from the replacement of existing bulbs and fixtures.
- Interviews & site visits to verify actual installations
- Estimation of free riders

<u>M&V Data and Assumptions</u>

Detailed information on commercial lighting installations will include:

- Account information and business type.
- A pre-installation equipment survey is essential to M&V and this data will be required as part of the rebate request.
- Total and types of bulbs, lamps, and fixtures installed
- Installed Wattage
- Light Output (Lumens)

The light brand and model number will be used to verify the type, wattage, light output and life, according to specifications provided through lighting manufacturers websites.

H. Commercial Indirect Cooling

1. Description/Objectives

This program is intended to offer a less energy intensive alternative to refrigerated air conditioning to businesses by promoting the use of high performance evaporative cooling technology.

This program will offer an incentive for installing an indirect cooling module that is an additional piece of equipment that mounts in front of the single-inlet evaporative cooling equipment as well as any indirect evaporative technology such as the Coolerado. The expense of an evaporative system with the additional module is slightly less than a refrigerated unit; however the performance is very competitive with the performance of a refrigerative cooling system. A 100% indirect evaporative cooler (such as the Coolerado) is more in the price range of a refrigerated unit.

Based on past sales in the Albuquerque region – as well as areas like Fresno and Phoenix, there will be no free riders in this program since customers aren't buying many of these units. One distributor in Albuquerque stated that in the last 10 years he has only sold about 24 units.

2. Implementation

This program will be targeted to small and medium size businesses, Architects & Engineering (A&E) firms, HVAC contractors and local distributors.

Education of the consumer and contractors is essential for success. Several events will be required to get the message out to all of the involved parties. We will need to be persistent with our message, and it has been noted that better contractor involvement is realized when the product distributor is used to leverage participation by the contractors. The distributors are the first line of sales when talking to contractors, and a more informed the counter sales staff will be required for the product to be successful.

3. Conditions

The unit must be installed at a PNM electric customer location, and a thermostat must control the unit. If there is not an existing thermostat, one will have to be installed. A contractor must install the units, and the contractor must verify the installation of the required equipment.

4. Incentive Structure

Rebates will be paid for the following:

- A $500 rebate for the installation of a 100% indirect evaporative technology such as the Coolerado.
- A $300 rebate for the installation of the indirect module
    - A $100 dollar additional rebate will be paid if a new direct module with 12-inch media is purchased in lieu of a new direct module with 8-inch media.

The rebate will be paid to the business owner. The contractor, or wholesaler/distributor is responsible for assisting the business owner in filling out the rebate form. The customer will mail the form to the third party rebate processor who will administer the rebates and ensure that all documentation and inspections are complete. Training sessions for contractors and wholesaler/distributors will be held during the marketing and outreach process.

The equipment must be installed prior to receiving the rebate.

5. Documentation & Inspections

The business owner must agree to inspections of the installed unit for M&V purposes. The equipment must be installed prior to receiving the rebate. Contractors must document the work, including labor costs, and equipment costs charged to the business owner.

6. Contractor & Retailer Responsibilities

Rebated forms must be properly filled out in order to receive the rebate. All rebate submissions must include required receipts and work documentation.

7. Target Market

Small and medium businesses and commercial customers that either currently have refrigerated air conditioning or are considering installing a refrigerated air conditioner will be the target of the program.

8. Marketing & Outreach

Efforts will be focused on specific market channels including direct mail and PNM hosted "contractor events." Other utilities have stated that educational events held at the distribution and contractor supply warehouses (in our case HVAC and lighting products) are excellent venues to educate and solicit participation from the contractor community. Program information will also be promoted through business associations such as the Building Owners and Managers Association (BOMA), International Facility Managers Association (IFMA), local chambers of commerce and facility managers' groups as well as trade associations, contractor groups and retailer organizations. PNM will also utilize its staff of commercial account managers to up-sell the program during regular account maintenance visits.

9. Relation to Existing Programs

There are no existing programs that offer incentives for evaporative cooling technologies in New Mexico. Regionally three other states offer incentives for evaporative cooling (Colorado, Utah, and California), and none of these states currently offer incentives for 100% indirect technologies.

10. Participant Costs

A local contractor experienced with installations of the Coolerado estimates that it will cost an additional $2,000 to install a Coolerado unit because of the additional weight, possible noise baffling, and plumbing.

11. Energy Savings

Energy savings are estimated to be 1,938 kWh and 1.584 kW per unit.

12. Measurement & Verification

The Potential Study identifies several challenges to implementing a program to replace refrigerative AC with evaporative AC because evaporative cooling is already much less expensive, and there would be a large percentage of free riders. However, this program is targeted at 100% indirect evaporative technology such as the Coolerado as well as high performance single inlet style evaporative coolers using advanced evaporative media (such as MasterCool® and UltraCool®).

For applications that are new installations such as a new business or replacement of existing refrigerated AC, a deemed savings method will be used to estimate initial energy savings. The energy savings of the previous section will be used. For applications retrofitting an existing single inlet evaporative cooler, the M&V contractor will verify installations and confirm that the unit was installed in place of refrigerated AC.

I. Commercial Load Management

1. Description/Objectives

The primary goal of the load management program is to diversify PNM's resource portfolio by the addition of cost effective load control resources. The intent of this program is to offer non-residential customers an incentive and the opportunity to participate in limiting the system peak demand on the highest peak demand days of the year. This program will be implemented by Comverge, Inc. and EnerNOC, Inc. EnerNOC is a nationally recognized demand side management implementer with a number of utility clients such as SDGE, SCE, National Grid and Connecticut Light and Power. Customer participants in their utility programs include Wal-Mart, AT&T, Marriott, Whole Foods and Tufts University.

Comverge will install load control devices similar to the residential devices on small (<150kW) commercial facilities. EnerNOC will install energy management systems on medium to large commercial facilities. A DSM program that is easily dispatched offers many benefits including:

- A resource that is independent of volatile fuel markets
- A relatively rapid solution to help manage occasional peak load transmission & generation constraints
- Zero negative environmental effects

2. Implementation

The Commercial Load Management program will be delivered through a third-party. The selected contractor will be responsible for marketing the program, installing and maintaining all equipment, and tracking and reporting results. The program will control air conditioning, lighting, manufacturing process equipment and other loads during peak

load periods. PNM system operators will control operation of the equipment. Capacity delivered under this program must respond within 10 minutes of notification.

There are several benefits to a turn-key demand response contract to PNM and its customers. In essence, PNM is purchasing dispatchable capacity of a specific size, and duration which is very similar in structure to a power purchase agreement.

The cost benefit of a turn-key program lies in the fact that the implementation contractor is compensated only for the proven capacity achieved and as such assumes the cost risk for customer acquisition of marketing; equipment purchase, installation and operation; and mitigation of customer attrition over time, through customer attrition, equipment failure or any other reason , PNM pays only for the delivered value of the contract. The payment is based specifically on actual monitored performance of the program. In addition, there are penalties for non-performance, states as liquidated damages. Further, the contract structure minimizes the requirement for PNM internal resources normally required in support of the program. By using experienced contractors, customer processes will be streamlined which should result in greater customer satisfaction.

The load management programs administrator was selected following an RFP process. Cost-effectiveness using the TRC test was a primary consideration along with other important factors including: technical viability, strength and experience of the company and ability to meet the supply-side load criteria. Final capacity targets and costs were defined during contract negotiations with each vendor. Ten-year contracts, contingent on NMPRC approval of PNM's tariff rider for cost recovery, have been negotiated between PNM and the selected contractors.

Comverge and EnerNOC will design, market, install and operate Direct Load Control (DLC) systems and assume all of the performance risk including customer acquisition and technical execution of the program. PNM system operators will dispatch the load control resource using a web-based interface.

3. Conditions

Comverge and EnerNOC will own the DLC systems and will be paid by PNM for delivered capacity. (please see Section XII for more details of the load management contracts.)

4. Incentive Structure

The participating customers will receive direct compensation for agreeing to have equipment installed. The incentives paid by Comverge to small commercial customers will be $25 per kW of load controlled. Payments to larger customers from EnerNOC will be based on the kW reduction and the complexity of the loads controlled.

5. Documentation & Inspections

The contractor will monitor activities, such as reaction time and load reduction quantity, and process & analyze the data monthly, present the reports to PNM, and tally these results in an annual report.

6. Contractor & Retailer Responsibilities

Comverge and EnerNOC will perform all marketing and equipment installation. They will monitor participants energy demand, maintain the equipment necessary to ensure load

reduction capability, and provide verification services and data to PNM. More specifically the contractor will provide to an independent program evaluator all the information needed to verify load reductions, including documentation, units methodology, criteria for sample selection, all data, and anything else needed to audit and verify its results.

7. Target Market

Comverge will target non-residential PNM customers receiving electric service under Rate Schedules 2A and 2B and customers with peak demand less than 150 kW on PNM's rate 3B and PNM TNMP-NM Service Rate Schedules 2 and 12. EnerNOC will target non-residential PNM customers on rates 4B, 5B, 15B, 17B and 30B and customers with peak demands greater than 150 kW on PNM rate 3B and PNM TNMP-NM Services Rate Schedules 2, 3, 5 and 12.

8. Marketing & Outreach

Comverge and EnerNOC will be responsible for designing and managing the entire residential load control program, including the marketing and outreach portions. Any marketing and outreach activities will be approved by PNM.

9. Relation to Existing Programs

There are no other existing programs designed to use load control equipment to reduce commercial demand.

10. Participant Costs

There will be no cost to the customer.

11. Energy Savings

The target capacity after four years of program operation is about 31 MW. Energy savings are not a goal of this load management program.

12. Measurement & Verification

For the facilities served by Comverge, a statistical sample of the participating customer sites will have interval meters installed. The actual load reduction at these locations will be used to determine the average load for capacity payment purposes. EnerNOC will install interval meters at all facilities, which will provide verification of load reductions. All performance and installation records will be made available to an independent evaluator for analysis and verification.

VIII. Appendix A – Avoided Costs and Financial Assumptions

The benefits of energy efficiency and load management are evaluated in the TRC model using PNM's avoided costs of energy. Avoided costs of energy are the costs that PNM would not incur as a result of lower energy consumption and demand resulting from implementation of energy efficiency and load management measures. The avoided costs used in the TRC model are the same as those used in the Potential Study. The following paragraphs, excerpted from page 3-18 of the Potential Study, describe the basis for the avoided costs:

"Avoided cost forecasts were developed by staff in PNM's planning group. Avoided cost forecasts were developed separately for generation energy, generation capacity, and transmission capacity. (Avoided costs of distribution were examined but PNM was not able to determine a credible avoided cost estimate. This is due primarily to the nature of the distribution system in that it is driven by standards and very localized load calculations.) Avoided generation energy costs were based on a blend of forward prices for coal and natural gas to account for both fuels being on the margin during the winter season in PNM. Through the first five years of the forecast period, avoided energy costs were estimated to be approximately 6 cents per kWh during on-peak periods and 2 cents per kWh during off-peak periods, after which avoided energy costs are escalated by 2 percent per annum to account for increases in labor costs over time.

Avoided generation capacity costs were estimated to be $114.88/kW-year based on the cost of a gas-fired combustion turbine in the base year. Going forward, this value was escalated at 2 percent per annum through the end of the forecast period to account for inflation. Avoided transmission capacity costs were estimated based on the avoided use of load-side generation to meet system peak through the year 2012, after which avoided transmission costs were estimated to be $20.28/kW-year based on the 33-year levelized costs of a new transmission line."

The following tables provide the avoided electric costs used in the TRC analysis. Costs shown are in real terms. The TRC analysis escalates these costs annually at the rate of inflation.

1. Electric Avoided Costs (Real 2006)

	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Summer Capacity
Units:	$/kWh	$/kWh	$/kWh	$/kWh	$/kW-yr
Data Year	2006	2006	2006	2006	2006
2007	0.061	0.025	0.063	0.023	114.880
2008	0.051	0.026	0.056	0.022	114.880
2009	0.044	0.023	0.051	0.022	114.880
2010	0.053	0.025	0.056	0.023	114.880
2011	0.053	0.026	0.060	0.024	114.880
2012	0.059	0.027	0.064	0.024	114.880
2013	0.063	0.028	0.077	0.026	114.880
2014	0.074	0.031	0.087	0.026	114.880
2015	0.076	0.032	0.094	0.029	114.880
2016	0.081	0.032	0.107	0.029	114.880
2017	0.094	0.035	0.124	0.031	114.880
2018	0.112	0.038	0.126	0.031	114.880
2019	0.108	0.037	0.138	0.035	114.880
2020	0.126	0.042	0.153	0.034	114.880
2021	0.140	0.044	0.156	0.037	114.880
2022	0.144	0.043	0.165	0.039	114.880
2023	0.165	0.047	0.177	0.040	114.880
2024	0.176	0.051	0.180	0.043	114.880
2025	0.176	0.049	0.182	0.043	114.880
2026	0.186	0.053	0.190	0.044	114.880
2027	0.186	0.054	0.190	0.046	114.880
2028	0.185	0.052	0.193	0.046	114.880
2029	0.204	0.057	0.201	0.047	114.880
2030	0.194	0.056	0.201	0.049	114.880
2031	0.198	0.056	0.203	0.050	114.880
2032	0.212	0.059	0.211	0.050	114.880
2033	0.211	0.061	0.212	0.053	114.880
2034	0.217	0.060	0.215	0.053	114.880
2035	0.237	0.065	0.221	0.054	114.880
2036	0.219	0.064	0.224	0.057	114.880
2037	0.219	0.064	0.224	0.057	114.880
2038	0.219	0.064	0.224	0.057	114.880
2039	0.219	0.064	0.224	0.057	114.880
2040	0.219	0.064	0.224	0.057	114.880

2. Financial Assumptions

Nominal Discount Rate	8.67%
Inflation Rate	2.00%
Real Discount Rate	6.54%
Base Year for Discounting	2007

IX. Appendix B – Program Performance Assumptions

The following describes the sources of the key program performance inputs used in the TRC model. Inputs are primarily from the report titled "Public Service New Mexico Electric Energy Efficiency Potential Study", September 20, 2006, Itron Inc. (Potential Study) and the associated excel spreadsheets. Some inputs were also taken from information provided in response to the RFP's for the programs that PNM proposes to be implemented by third-party contractors.

Refrigerator Recycling					
Unit kWh Savings [1]	Unit kW Savings [2]	Free Rider Factor [3]	1st Yr Target Participation [4]	Incremental Cost [5]	Measure Life Yrs [6]
663	0.0873	7%	10,000	$ -	10

Residential Lighting					
Unit kWh Savings [7]	Unit kW Savings [8]	Free Rider Factor [9]	1st Yr Target Participation [10]	Incremental Cost [11]	Measure Life Yrs [12]
575	0.00237	30%	391,000	$ 5.00	8

Energy Saver Kit						
Unit Therm Savings [13]	Unit kWh Savings [14]	Unit kW Savings [15]	Free Rider Factor [16]	1st Yr Target Participation [17]	Incremental Cost [18]	Measure Life Yrs [19]
54	48	0.00237	0%	1,500	$ -	8

Energy Star Home						
Unit Therm Savings [20]	Unit kWh Savings [21]	Unit kW Savings [22]	Free Rider Factor [23]	1st Yr Target Participation [24]	Incremental Cost [25]	Measure Life Yrs [26]
126	1483	0.87	30%	400	$ 2,238.00	30

Residential Indirect Cooling					
Unit kWh Savings [27]	Unit kW Savings [28]	Free Rider Factor [29]	1st Yr Target Participation [30]	Incremental Cost [31]	Measure Life Yrs [32]
1292	1.056	0%	100	$ 950.00	16

Commercial Lighting					
Unit kWh Savings [33]	Unit kW Savings [34]	Free Rider Factor [35]	1st Yr Target Participation [36]	Incremental Cost [37]	Measure Life Yrs [38]
188	0.029	60%	75,000	$ 14.86	7

Commercial Indirect Cooling

Unit kWh Savings [39]	Unit kW Savings [40]	Free Rider Factor [41]	1st Yr Target Participation [42]	Incremental Cost [43]	Measure Life Yrs [44]
1938	1.584	0%	50	$ 2,000.00	16

Footnotes

1	Potential Study, Appendix C, p. C1-1, Base UEC – Post UEC
2	Potential Study, Appendix C, p. C1-1, Peak Watts/Household
3	Potential Study, excel file "O_Saere1_mod.xls", Total Bld Stock sheets, total participants/natural occurring participants
4	contractor response to PNM RFP
5	There is no cost to the participants
6	Potential Study, Appendix C
7	Potential Study, excel file "O_Saere1_mod.xls", Measure Input Table sheet, weighted average savings for CFLs assuming 12 per household
8	Potential Study, excel file "O_Saere1_mod.xls", Measure Input Table sheet, weighted average savings for CFLs assuming 12 per household
9	Potential Study, p. 4-17
10	contractor response to PNM RFP
11	Potential Study, p. 4-17
12	Potential Study, Appendix C
13	Gas Potential Study, Appendix A, p.1, 20% of the therm savings from the Low Income Insulation and Weatherization program plus savings from a water heater wrap and low-flow showerheads
14	Potential Study, excel file "O_Saere1_mod.xls", Measure Input Table sheet, weighted average savings for CFLs assuming 10 per household
15	Potential Study, excel file "O_Saere1_mod.xls", Measure Input Table sheet, weighted average savings for CFLs assuming 10 per household
16	There are no free-riders in this program
17	PNM and MFA estimated target
18	There is no cost to the participants
19	Potential Study, Appendix C., CFL life
20	Gas Potential Study, Appendix, p. 1, savings reduced by 47% to account for passage of the 2004 IECC in NM
21	Gas Potential Study, Appendix, p. 1, savings reduced by 47% to account for passage of the 2004 IECC in NM
22	Potential Study, excel file "O_Saere1_mod.xls", Measure Input Table sheet, weighted average kW per kWh savings for space cooling measures (reduced by 25%) times the kWh savings assumed. (The Potential Study does not list an Energy Star Home package as a program therefore the average space cooling measures kW savings ratio was used but reduced by 25% to account for other upgrades in an ES Home such as lighting and appliances.)
23	Local contractor discussions
24	Local contractor discussions
25	Gas Potential Study, Appendix A, p. 1, cost reduced by 47% to account for upgrades required by passage of the 2004 IECC in NM.

26	Gas Potential Study, Appendix A
27	Potential Study, p. 4-24
28	Potential Study, p. 4-24
29	There are no free riders due to no local sales of indirect cooling
30	local contractor discussions
31	local contractor discussions
32	Potential Study, Appendix C, and local contractor discussions
33	Potential Study, excel file "O_Saece1_mod-TRCinput.xls", Yrly Energy Savings - Measure sheet, weighted average savings for all lighting measures
34	Potential Study, excel file "O_Saece1_mod-TRCinput(2).xls", Yrly Demand Savings - Measure sheet, weighted average savings for all lighting measures
35	Potential Study, "O_Saece1_mod-TRCinput(2).xls", Yrly Energy Saved Nat - Measure sheet
36	Potential Study, excel file "O_Saece1_mod-TRCinput.xls", Yrly Energy Savings - Measure sheet, 40% of the total units in year 1
37	Potential Study, excel file "O_Saece1_mod-TRCinput.xls", Yrly Energy Savings - Measure sheet, weighted average cost for all lighting measures
38	Potential Study, excel file "O_Saece1_mod-TRCinput.xls", Yrly Energy Savings - Measure sheet, weighted average life for all lighting measures
39	Potential Study, p. 4-24, residential savings increased by 50% to account for longer run time and larger capacity
40	Potential Study, p. 4-24, residential savings increased by 50% to account for longer run time and larger capacity
41	There are no free riders due to no local sales of indirect cooling
42	local contractor discussions
43	local contractor discussions
44	Potential Study, Appendix C, and local contractor discussions

X. Appendix C – Promotional Plan

PNM Energy Efficiency Program Promotional Spending Overview		
Item	**Description**	**Cost**
Radio	Six weeks of statewide bilingual radio in electric service communities.	$ 75,000
PNM Bill Inset	At least six months	$ 0
PNM.com	Continuous presence, with featured positioning at least four months	$ 0
Direct Mail	Customer mailings to educate and encourage program participation	$ 100,000
Newspaper and Magazine	Advertising to educate and encourage program participation	$ 25,000
Events and sponsorships	Customer events and sponsorships to generate awareness and participation	$ 10,000
Call Center	Subscription sign-ups, information, and corss-promotion	$ 0
Toll free number	Fees for customer calls to 1-866-REBATES	$1,500
PNM Offices	Posters in PNM electric community payment facilites	$ 2,500
Collateral Materials	Brochures, rebate forms, and other printed collateral materials for customer information	$ 86,000
Total		**$ 300,000**

XI. Appendix D – Weatherization Assistance Summary

M E M O R A N D U M

DATE: January 8, 2007**TO:** Jane Yee, PRC

FROM: Debbie Davis, Programs & Initiatives Manager

RE: Weatherization Assistance Program (WAP)

BACKGROUND: MFA, as the state's program administrator for the Weatherization Assistance Program, receives funding from several sources. Those sources are the US Department of Energy (DOE), the NM Department of Human Services (LIHEAP), the NM Department of Finance & Administration (State funding from legislature), and the Public Service Company of New Mexico (PNM) through its Energy Efficiency Program.

REGULATIONS
REGULATIONS GOVERNING WAP ARE LOCATED AT 10CFR440, WITH THE FINANCIAL ASSISTANCE RULES AT 10CFR600. ADDITIONAL REGULATIONS ARE FOUND IN THE OMB CIRCULARS THAT PERTAIN TO THE TYPE OF ORGANIZATION BEING FUNDED. IN ADDITION, MFA HAS A WAP MANUAL THAT CAN BE FOUND ON OUR WEB PAGE AT WWW.HOUSINGNM.ORG, AS WELL AS TWO FIELD GUIDES: NM MECHANICAL SYSTEMS FIELD GUIDE AND NM WEATHERIZATION FIELD GUIDE.

USES FOR WAP FUNDING
WAP MAY BE USED FOR LEAKAGE REDUCTION INCLUDING REPAIR OR REPLACEMENT OF BROKEN GLASS OR THRESHOLDS, PACKING CRACKS, CAULKING OR WEATHER-STRIPPING, INSTALLATION OF DOOR SWEEPS, FIREPLACE DAMPERS, WATER HEATER INSULATION BLANKETS, THERMOSTAT CONTROLS, EXTERIOR DOORS, EXTERIOR WINDOWS; INCIDENTAL REPAIRS INCLUDING LUMBER TO FRAME OR REPAIR WINDOWS AND DOORS, ROOFING MATERIALS TO PATCH OR REPAIR LEAKS, PROTECTIVE MATERIALS (PAINT), OR REPAIR MATERIALS; HEALTH AND SAFETY INCLUDING STOVE PIPES, SMOKE AND CARBON MONOXIDE DETECTORS, SPACE HEATERS, FURNACE REPAIR/REPLACEMENT, MOISTURE RELATED PROBLEMS, WIRING PROBLEMS; CEILING, WALL AND FLOOR INSULATION; MEASURES FOR MOBILE HOMES; AND ELECTRIC BASE LOAD MEASURES LIKE NEW REFRIGERATORS.

WHAT IS WEATHERIZED
MFA HAS FOUND THAT THE MAJORITY OF THE HOMES WEATHERIZED ARE MOBILE HOMES, WITH STICK BUILT HOMES NEXT. OVER THE PAST TWO YEARS, THE NUMBER OF RENTAL UNITS BEING WEATHERIZED HAS INCREASED FROM ZERO TO APPROXIMATELY 5% OF TOTALS.

FUNDING
- Plan year 2006-2007 total $4,797,900.78.
    - DOE - formula grant ($1,857,690), carryover ($140,210.78)
    - State appropriations - as line item in DFA budget + direct allocation ($800,000)

  - LIHEAP (15% of total federal funds to state, or whatever we can negotiate) (est. $2,000,000) **ACTUAL: $710,218.59**
  - Public Utility funding - Efficient Use of Energy Act ($823,453/yr. for 3 yrs.)
- Plan year 2005-2006 total $6,064,368.65
  - DOE - formula grant ($1,730,427.00), carryover ($215,488.88)
  - State appropriations - as line item in DFA budget, direct allocation from regular session ($800,000) and from Special Session in October ($2,500,000)
  - LIHEAP (15% of total federal funds to state, or whatever we can negotiate) $1,413,600
  - Public Utility funding - Efficient Use of Energy Act ($823,453/yr. for 3 yrs., on a calendar year)
- Per unit average:
  - 06-07 is $2,826, maximum $3,939 (last maximum x 4.7%)
  - 05-06 per unit average $2,744, maximum $3,762.
  - 04-05 average $2,672, maximum $3,663.
  - 03-04 average $2,614, maximum $3,583.
  - 02-03 average $2,568, maximum $3,520

SELECTION OF SUBGRANTEES

Under MFA's procurement policies, as well as federal regulations, MFA releases a Request for Proposals (RFP), usually every three years. The entities who respond must be a Community Action Agency ("CAA") or other public or nonprofit entity. The entities must certify that they do not have any significant outstanding findings for any MFA-administered housing programs and certify they have not been debarred or suspended from doing business with the federal government. After receipt of the responses to the RFP, the review process moves from a staff review committee, executive committee, to the WAP Policy Advisory Committee and finally to the Board of Directors who have final approval authority.

There are currently four (4) subgrantee agencies:

- Los Amigos Educational Resource Center, Santa Fe
- Central New Mexico Housing Corporation, Albuquerque
- Eastern Plains Council of Governments, Clovis
- Community Action Agency of Southern New Mexico, Las Cruces

A complete listing of the service areas of these subgrantees is attached. Between them, they cover all 33 counties and the pueblos that lie within those counties.

MARKETING AND OUTREACH IN NEW MEXICO

MFA has been administering the WAP program since 1997. Since beginning the program MFA has produced a brochure for WAP that is (1) passed through to the subgrantees, and (2) circulated by MFA staff as they travel throughout the State of New Mexico. Additional marketing/outreach is provided through MFA's web page. MFA is listed in the State of New Mexico program listings, on the DOE Energy Efficiency web page as a WAP provider, on the WAPTAC (Weatherization Assistance Program Technical Assistance Center) web page as a WAP provider, and on the COSCDA (Council of State Community Development Agencies) web page as a WAP provider. MFA refers hundreds of prospective clients to the appropriate subgrantee agency over the course of a year from questions received via e-mail, by snail mail, and by telephone calls.

In order to provide as much information as possible on outreach for WAP, each subgrantee is listed below with a description of their activities undertaken to reach clients.

Los Amigos Educational Resource Center, Santa Fe. Staff at Los Amigos has been working in the program for 20 years. Their outreach program consists of:

- Newspaper advertisements throughout their service area such as the Taos News, Rio Grande Sun, Las Vegas Optic, Raton Range, Cibola County Beacon, Farmington Daily Times, Gallup Herald, and the New Mexican.
- Their Executive Director was interviewed on Taos radio station KXMT, 99.1; on Q-Suave Santa Fe 8.10; and on Las Vegas station KFUN 1230AM.
- Presentations have been made at the Santa Clara Pueblo Senior Center, at Acoma Pueblo, and at the Las Vegas Senior Center.
- While working at homes in their service area, they post yard signs advertising the program and providing their toll free telephone number.
- They place blank application forms in senior centers, community centers, city offices, meal sites.
- They receive approximately 31 applications per week.

Central New Mexico Housing Corporation, Albuquerque. Staff at Central New Mexico has been involved in the WAP program for 25 years. Their program is publicized through a variety of means.

- They advertise in the local papers twice a year – in the Albuquerque Journal and the Valencia County Bulletin.
- Flyers and applications are sent to senior centers such as Barelas Senior Center, Bear Canyon Senior Center, Highland Senior Center, Los Volcanes Senior Center, North Valley Senior Center, Palo Duro Senior Center and Manzano Mesa Multigenerational Center.
- Flyers are sent out through the City of Albuquerque Meals on Wheels program to each of the 800 plus clients who receive meals.
- Roadrunner Food Bank distributes flyers to their listing of agency partners, and includes the flyers in boxes of food distributed.
- Letters sent to the governors of the pueblos twice a year to make them aware of the program.
- Listing at agencies below as an organization where elderly and low income families can receive assistance for weatherization services:
    - Department of Senior Affairs (City of Albuquerque)
    - United Way
    - City of Albuquerque 311 information line
    - Midwest Community Action Agency
    - American Red Cross
- Crews distribute door hangers in the neighborhoods where they are working.
- Has waiting list when necessary. In addition, keeps listing of clients who are over income at 150% but might be eligible if limit goes to 200%
- They receive 20 to 25 new applications a week.

Eastern Plains Council of Governments, Clovis. This is MFA's newest subgrantee agency. Their outreach program consists of:

- Advertisements in numerous papers, at least one in every county being served.
- Distributed brochures at senior citizens centers and public offices, Red Cross offices, community service centers, senior meal sites.
- Sent staff person out different directions to meet with folks at senior centers to do application campaigns at to build up list of qualified clients.

- Started out with waiting list from CAA, but had to go out and do outreach to build up numbers to complete assigned PNM units.
- Has waiting list but continues to take applications. They receive half a dozen new applications a week.

Community Action Agency of Southern New Mexico, Las Cruces. CAA staff has been working on this program for the last 14 years. Their marketing/outreach program consists of:

- Distributing brochures and applications at their branch offices throughout their services area, as well as senior citizens centers and public offices, medical offices and senior meal sites.
- Staff person goes out to meet with local elected officials, like the mayor of Columbus, to distribute information and applications.
- Flyers are distributed in neighborhoods where homes are being worked on
- Has waiting list but continues to take applications.
- They receive 25 new applications a week.

CLIENT ELIGIBILITY

THE WEATHERIZATION ASSISTANCE PROGRAM (WAP) PROVIDES ASSISTANCE TO LOW INCOME HOMEOWNERS TO IMPROVE THE ENERGY EFFICIENCY OF THEIR HOMES THUS REDUCING THEIR UTILITY COSTS. TO BE ELIGIBLE HOMEOWNERS MUST HAVE INCOMES RELATIVE TO FAMILY SIZE AT OR BELOW 150% OF FEDERAL POVERTY GUIDELINES, BUT DUE TO THE SCARCITY OF RESOURCES, PRIORITY IS GIVEN TO THE LOWEST INCOME HOUSEHOLDS. RENTERS WHO QUALIFY UNDER THE INCOME GUIDELINES MAY ALSO BE ELIGIBLE, IF THEIR LANDLORDS AGREE TO (1) PARTICIPATE FINANCIALLY, IF POSSIBLE, AND (2) AGREE TO NO RENT INCREASES FOR THREE YEARS BASED UPON IMPROVEMENTS MADE THROUGH THE WAP. HOUSEHOLDS RECEIVING DISABILITY PAYMENTS FROM SOCIAL SECURITY ARE AUTOMATICALLY ELIGIBLE FOR WAP. APPLICANTS FOR WAP MUST COMPLETE AN APPLICATION, BE AVAILABLE FOR A PERSONAL INTERVIEW AND PROVIDE DOCUMENTATION OF LOW-INCOME, ELDERLY AND/OR HANDICAPPED STATUS. THE SUBGRANTEE VERIFICATION OF INCOME ELIGIBILITY FOR EACH CLIENT MUST BE DOCUMENTED FOR THE 12-MONTH PERIOD PRECEDING THE APPLICATION BY OFFICIAL DOCUMENT(S) FROM THE INCOME SOURCE, COPIES OF AN INCOME TAX RETURN, OR, IF NO OTHER MEANS ARE AVAILABLE, A NOTARIZED SELF-CERTIFICATION OF INCOME.

A ranking system is used to determine the order in which applicants will receive services. It is designed so that the households in greatest need will receive services before those in less need. The ranking criteria consists of household size, household income, fuel type for heating the home, vulnerability (elderly and/or handicapped) and the condition of the home to be weatherized. A Ranking Sheet is completed for each applicant approved for weatherization services. The following requirements are to be met:

1. Subgrantees with multiple service counties may conduct the ranking by service area in order to facilitate the scheduling of services.

2. If an emergency condition exists relative to the condition of the dwelling unit (from the standpoint of the personal health or safety of the occupants), and if the household includes among eligible persons an infant, an elderly person or a handicapped person, the application should be given priority processing, irrespective of the ranking that would otherwise be assigned.

3. Apart from an emergency situation, each ranked application must be inserted into a waiting list, if any, of applications at the point to which it is entitled by the ranking assigned. Scheduling of services for that application should then be made on the basis of the application's sequence in the updated waiting list.

4. In those instances where rankings are equal, priority for scheduling of weatherization services must be given as follows:

   1st A dwelling unit having an occupant who is both elderly and handicapped
   2nd A dwelling unit having an occupant who is elderly
   3rd A dwelling unit having an occupant who is handicapped
   4th A dwelling unit having a child or children below two (2) years of age
   5th A dwelling unit not assigned the 1st through 4th priorities but having the earliest date of approval of eligibility

When two or more applications have both equal ranking and equal scheduling priority, scheduling of services should be made in the date order that eligibility was approved. Exceptions to the income eligibility rule are households where at least one member is receiving "Title IV or XVI of the Social Security Act or applicable State or local law" (Social Security disability or state disability payments). These households automatically qualify under income eligibility. DOE issues poverty income guidelines for use by WAP along with a definition of what constitutes income on an annual basis. Those guidelines are forwarded to subgrantees, usually within 48 hours of receipt.

MONITORING OF SUBGRANTEES

MFA is required to perform an annual on-site monitoring visit with each subgrantee. During the monitoring visits MFA staff looks at the entire program including client qualification and eligibility, fiscal policies and procedures, procurement, recordkeeping, and inspection of the units that have been or are in the process of being weatherized. 5% of units already completed are inspected.

On a monthly basis MFA staff performs analysis and evaluation of the invoices submitted by each subgrantee on our online system. We examine expenditure rates, unit production and unit averages. The invoices are used to assist MFA staff in selecting units to be monitored and financial transactions to be traced.

AUDITS AND MONITORING OF MFA

MFA is monitored annually by independent auditors and the Office of the State Auditor. In the audit for the year ending September 30, 2005, WAP was identified as a major program and was reviewed. There were no findings with regards to WAP. Additionally, DOE conducts a monitoring visit every other year, as travel funding is available. Our last monitoring was done in May 2005, and DOE staff plans on being in New Mexico in the late summer of 2007.

Weatherization Assistance Program – 2006-2007

For More Information:

For the counties of **Cibola, Colfax**, **Los Alamos**, **McKinley, Mora**, **Rio Arriba**, **San Juan, San Miguel**, **Santa Fe**, **Taos** and the Pueblos of **Acoma, Jicarilla Apache, Laguna, Nambe, Picuris, Pojoaque, San Ildefonso, San Juan, Santa Clara, Taos**, **Tesuque, and Zuni,** contact:

LOS AMIGOS EDUCATIONAL RESOURCE CENTER

1549 6th Street
Santa Fe, NM 87505-3473
505-983-7743
1-888-303-7743

For the counties of **Bernalillo**, **Sandoval**, **Torrance** and **Valencia** and the Pueblos of **Cochiti**, **Isleta**, **Jemez**, **San Felipe**, **Sandia**, **Santa Ana**, **Santo Domingo**, and **Zia**, contact:

CENTRAL NEW MEXICO HOUSING CORPORATION

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For the counties of **Curry**, **DeBaca**, **Guadalupe**, **Harding**, **Lea**, **Quay**, **Roosevelt**, **Union**, contact:

EASTERN PLAINS COUNCIL OF GOVERNMENTS

418 Main Street
Clovis, NM 88101
505-762-4505
1-800-784-9067

For the counties of **Catron**, **Chaves**, **Doña Ana**, **Eddy**, **Grant**, **Hidalgo**, **Lincoln**, **Luna**, **Otero**, **Sierra**, and **Socorro,** and the Pueblo of **Mescalero Apache** contact:

COMMUNITY ACTION AGENCY OF SOUTHERN NEW MEXICO

320 East Wyatt Drive
Las Cruces, NM 88001
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XII. Appendix E – Load Management Contract Details and TRC Analysis

1. Load Management Contract Summary

PNM has negotiated contracts with two companies to deliver peak capacity in the form of direct load control. These contracts are contingent on NMPRC approval of the proposed load management programs. The two companies were selected from the respondents to an RFP for demand-side supply alternatives. The following table lists the major details of the contracts with Comverge, Inc. and EnerNOC, Inc.

	Comverge	**EnerNOC**
Contract Term	10 years	10 years
Contract Start Date	Day of NMPRC Approval	Day of NMPRC Approval
Total Program Cost	$41,329,727	$20,165,879
Levelized Cost per kW	$111.12	$101.01
Targeted Program Capacity	43 MW	20 MW
Control Season (for dispatch)	June 1st - September 30	June 1st - September 30
Dispatch Limits	Maximum of 100 hours per control season. Maximum 4 hours per day.	Maximum of 100 hours per control season. Maximum 6 hours per day.
Minimum Response Time	10 minutes	10 minutes
Basis of Capacity Payments	12 monthly payments based on installed capacity.	4 monthly payments during the control seasons based on installed capacity plus energy payments for each hour of dispatch.
Verification of Actual Capacity	Statistical sample of installed units to have interval meters installed which are used to determine the average load per unit.	All units will have interval meters and the load will be validated after each dispatch event.
Penalty for Not Meeting Contract Capacity	Schedule of liquidated damages applied to the capacity deficit	Schedule of liquidated damages applied to the capacity deficit
Early Termination	Early termination by PNM allowed if cost recovery is disallowed in the future by the NMPRC. Termination fees apply.	Early termination by PNM allowed if cost recovery is disallowed in the future by the NMPRC. Termination fees apply.
Customer Incentives	$25 annually for residential and $25/kW for commercial	Variable based on the complexity and nature of the load.
Target Customers	Residential and small commercial less than 150 kW peak demand including restaurants, small stores and offices.	Medium to large commercial, institutional and industrial greater than 150 kW peak demand including supermarkets, hotels, hospitals, offices, education, manufacturing
Target Loads	Central refrigerated AC, electric water heating, pool pumps, small commercial loads	HVAC components, refrigeration, non-essential lighting, pumps

Technology Employed	Pager or radio controlled switches installed on exterior AC units. Controlled through web-based activation system. AC compressor is cycled, fans remain on.	Customized energy management controls installed at each site. Controlled through web-based activation system. Customer gains real-time access to consumption data through EnerNOC's energy analytics and presentment software.
Local Office	Local call center to manage recruiting, installation and maintenance using local staffing and contractors.	Regional office to coordinate with local program manager and sales staff. Region call center to respond to customer inquiries.
Marketing Plan	Multi-channel approach including direct mail, bill inserts, radio, print web and co-marketing. All materials approved by PNM	Primarily one-on-one selling with all materials approved by PNM

2. Load Management Contract Pricing – Benefit - Cost Analysis (Total Resource Cost Test - TRC)

The following chart contains the TRC analysis of the Residential Load Management program and the Commercial Load Management program, including the pricing terms and conditions specific to the contracts between PNM and Comverge, Inc. and EnerNOC, Inc.

[This document will be provided to the NMPRC and parties under an appropriate protective order]

XIII. Appendix F – Energy Efficiency Programs TRC Analysis Output

PNM Year 1 Electric - Res and Comm
GDS ASSOCIATES - COST EFFECTIVENESS SCREENING TOOL©
ANALYSIS RESULT SUMMARY

Analysis Date: 1/21/2007

	PROGRAMS	Sector	NPV of BENEFITS				NPV of COSTS					Ratio: TRC
			Electric	Non-Electric	Other	Program Total	Administrative	Rebates	Customer	Incentive	Program Total	
#1	Low Income Energy Saver Kit	Residential	$ 284,937.60	$ 369,637	$ -	$ 654,574	$ 75,454.96	$ 450,000	$ -	$ -	$ 525,455	1.25
#2	Refrigerator Recycling	Residential	$ 3,261,947.75	$ -	$ -	$ 3,261,948	$ 1,211,153.40	$ 300,000	$ (300,000)	$ -	$ 1,211,153	2.69
#3	Energy Star Home	Residential	$ 898,873.47	$ 564,661	$ -	$ 1,463,534	$ 95,765.75	$ 200,000	$ 695,200	$ -	$ 990,966	1.48
#4	Residential Lighting	Residential	$ 4,236,332.79	$ -	$ -	$ 4,236,333	$ 684,626.65	$ 664,700	$ 1,290,300	$ -	$ 2,639,627	1.60
#5	Advanced Evaporative Cooling	Residential	$ 228,751.89	$ -	$ -	$ 228,752	$ 54,577.27	$ 35,000	$ 20,000	$ -	$ 109,577	2.09
#6	Commercial Lighting	C/I	$ 2,230,456.71	$ -	$ -	$ 2,230,457	$ 143,381.54	$ 375,000	$ 739,500	$ -	$ 1,257,882	1.77
#7	Commercial Cooling	C/I	$ 171,563.92	$ -	$ -	$ 171,564	$ 54,618.06	$ 25,000	$ 75,000	$ -	$ 154,618	1.11
#8	-	C/I	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
#9	-	C/I	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
#10	-	0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-
	Residential Sector Subtotals: (NPV $)*		$8,910,843	$934,297	$0	$9,845,141	$2,121,578	$1,649,700	$1,705,500	$0	$5,476,778	1.80
	Low Income Sector Subtotals: (NPV $)*		$0	$0	$0	$0	$0	$0	$0	$0	$0	-
	C/I Sector Subtotals: (NPV $)*		$2,402,021	$0	$0	$2,402,021	$198,000	$400,000	$814,500	$0	$1,412,500	1.70
	Totals: (NPV $)*		**$11,312,864**	**$934,297**	**$0**	**$12,247,162**	**$2,319,578**	**$2,049,700**	**$2,520,000**	**$0**	**$6,889,278**	**1.78**

* Sector-level subtotals and grand total NPVs include associated shareholder incentives (if any)

Resources

	PROGRAMS	Sector	Lifetime				
			kW Saved - Summer	kW Saved - Winter	Electric kWh Saved	Gas/Other in MMBTU Saved	Water in Gallons Saved
#1	Low Income Energy Saver Kit	Residential	301	3,007	6,897,600	64,200	-
#2	Refrigerator Recycling	Residential	8,715	8,300	61,694,952	-	-
#3	Energy Star Home	Residential	7,243	10,140	12,457,200	151,200	-
#4	Residential Lighting	Residential	4,471	44,712	102,550,626	-	-
#5	Advanced Evaporative Cooling	Residential	1,724	-	2,067,200	-	-
#6	Commercial Lighting	C/I	6,112	9,168	39,586,406	-	-
#7	Commercial Cooling	C/I	1,293	-	1,550,400	-	-
#8	-	C/I	-	-	-	-	-
#9	-	C/I	-	-	-	-	-
#10	-	0	-	-	-	-	-
	Residential Sector Subtotals:		22,453	66,159	185,667,578	215,400	-
	Low Income Sector Subtotals:		-	-	-	-	-
	C/I Sector Subtotals:		7,405	9,168	41,136,806	-	-
	Totals:		**29,858**	**75,327**	**226,804,384**	**215,400**	-